

# **EXHIBIT B**



US010959546B2

(12) **United States Patent**  
**Kressin et al.**

(10) **Patent No.:** **US 10,959,546 B2**  
(45) **Date of Patent:** **Mar. 30, 2021**

(54) **OVER-THE-DOOR HANGING APPARATUS**

(56) **References Cited**

(71) Applicant: **MCS Industries, Inc.**, Easton, PA (US)

U.S. PATENT DOCUMENTS

(72) Inventors: **Matthew S. Kressin**, Allentown, PA (US); **Michael Lee Pyle**, Sugar Grove, IL (US)

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(73) Assignee: **MCS INDUSTRIES, INC.**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **16/938,629**

(22) Filed: **Jul. 24, 2020**

Columbia Frame, Instructions to hang mirror over the door, Columbia Frame Inc., 6251, rue Notre-Dame, Montreal, Quebec H1N 2E9, Nov. 23, 2005.

(65) **Prior Publication Data**

US 2020/0352364 A1 Nov. 12, 2020

(Continued)

**Related U.S. Application Data**

*Primary Examiner* — Todd M Epps

(74) *Attorney, Agent, or Firm* — Belles Katz LLC

(63) Continuation of application No. 15/931,951, filed on May 14, 2020, which is a continuation-in-part of (Continued)

(51) **Int. Cl.**

**A47G 1/16** (2006.01)

**A47G 1/02** (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC ..... **A47G 1/1653** (2013.01); **A45D 42/00** (2013.01); **A47G 1/02** (2013.01); **F16B 45/00** (2013.01); **F16B 5/065** (2013.01); **F16B 5/07** (2013.01)

(58) **Field of Classification Search**

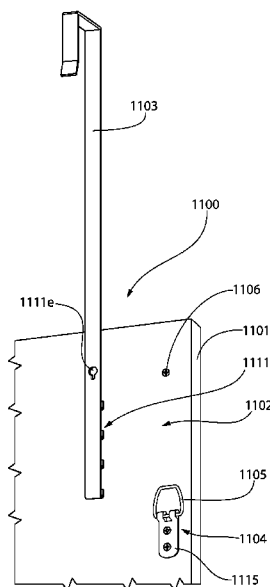
CPC ..... A47G 1/1653; A47G 1/02; A47G 1/10; A47G 1/20; F16B 45/00; F16B 5/065; F16B 5/07; F16M 13/022

(Continued)

(57) **ABSTRACT**

An over-the-door hanging apparatus. In one aspect, the apparatus include a mirror apparatus having a rear surface, first and second mounting elements located on the rear surface of the mirror apparatus opposite sides of the vertical centerline; a first elongate member having a first bracket for engaging a top edge of a door, a first hook, and a second hook, and a second elongate member having a second bracket for engaging the top edge of the door, a first hook, and a second hook. The mirror apparatus may be mounted to the first elongate member through slidable mating between the first mounting element and one of the first and second hooks of the first elongate member slidable mating between the second mounting element and one of the first and second hooks of the second elongate member.

**20 Claims, 85 Drawing Sheets**



**Related U.S. Application Data**

application No. 16/192,218, filed on Nov. 15, 2018, which is a continuation-in-part of application No. 15/726,865, filed on Oct. 6, 2017, now Pat. No. 10,238,221, which is a continuation-in-part of application No. 15/652,586, filed on Jul. 18, 2017, now Pat. No. 9,801,478, which is a continuation of application No. 15/475,963, filed on Mar. 31, 2017, now Pat. No. 10,080,448, which is a continuation-in-part of application No. 15/297,291, filed on Oct. 19, 2016, now Pat. No. 9,622,600, which is a continuation of application No. 15/084,102, filed on Mar. 29, 2016, now Pat. No. 9,480,350, which is a continuation-in-part of application No. 14/747,656, filed on Jun. 23, 2015, now Pat. No. 9,386,867, which is a continuation-in-part of application No. 14/300,834, filed on Jun. 10, 2014, now Pat. No. 9,060,627, which is a continuation of application No. 14/028,839, filed on Sep. 17, 2013, now Pat. No. 8,746,644, which is a continuation of application No. 12/915,747, filed on Oct. 29, 2010, now Pat. No. 8,534,627.

- (60) Provisional application No. 62/848,834, filed on May 16, 2019, provisional application No. 62/586,263, filed on Nov. 15, 2017, provisional application No. 62/405,325, filed on Oct. 7, 2016, provisional application No. 62/216,703, filed on Sep. 10, 2015, provisional application No. 61/334,914, filed on May 14, 2010.

(51) **Int. Cl.**

*A45D 42/00* (2006.01)

*F16B 45/00* (2006.01)

*F16B 5/07* (2006.01)

*F16B 5/06* (2006.01)

(58) **Field of Classification Search**

USPC ..... 248/475.1, 489, 490, 497, 466; 211/34  
See application file for complete search history.

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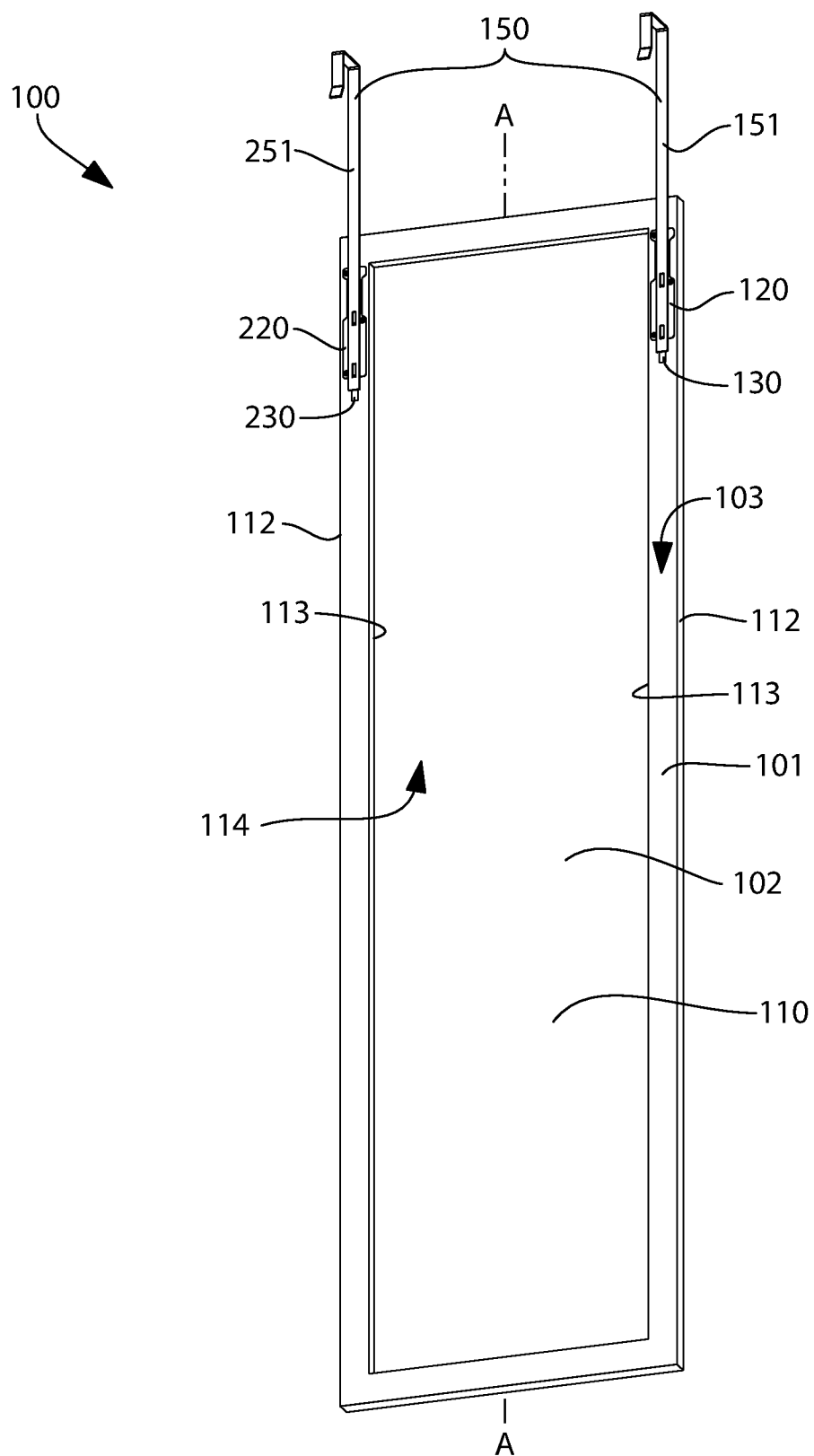
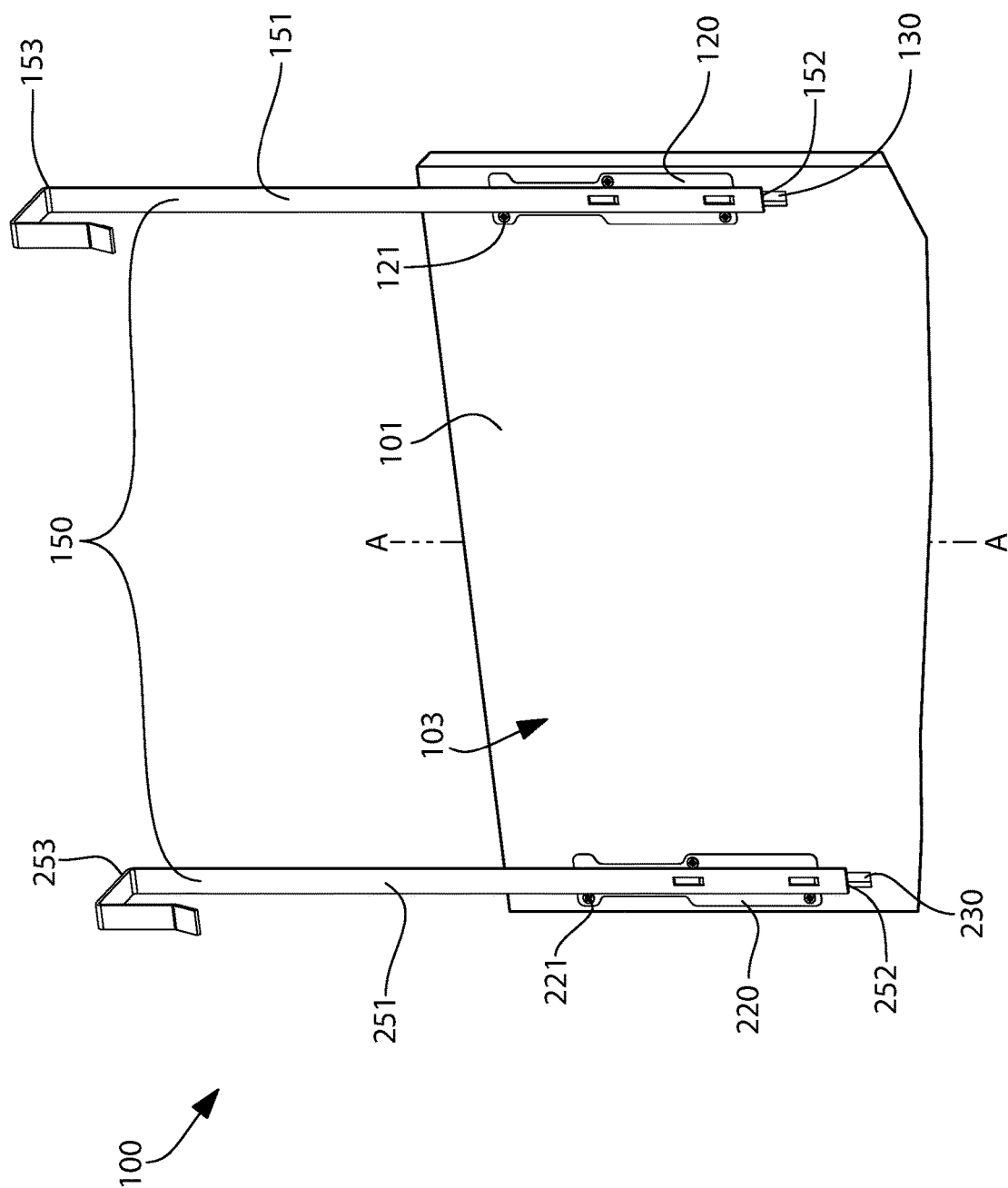


FIG. 1



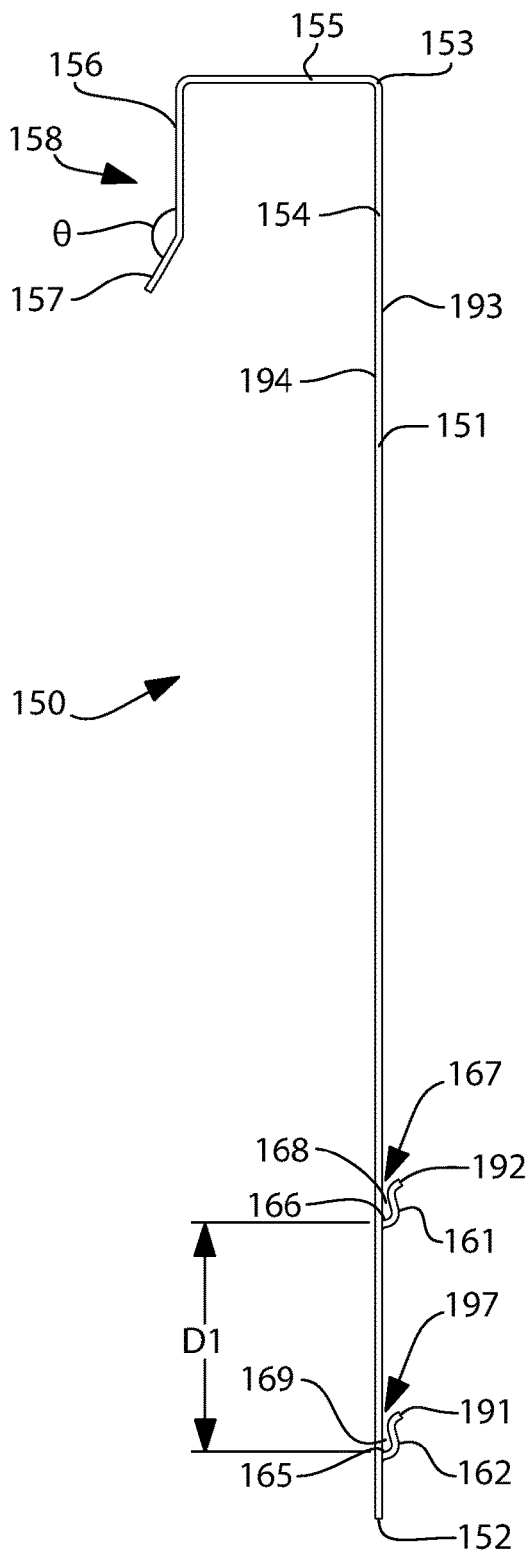


FIG. 3A

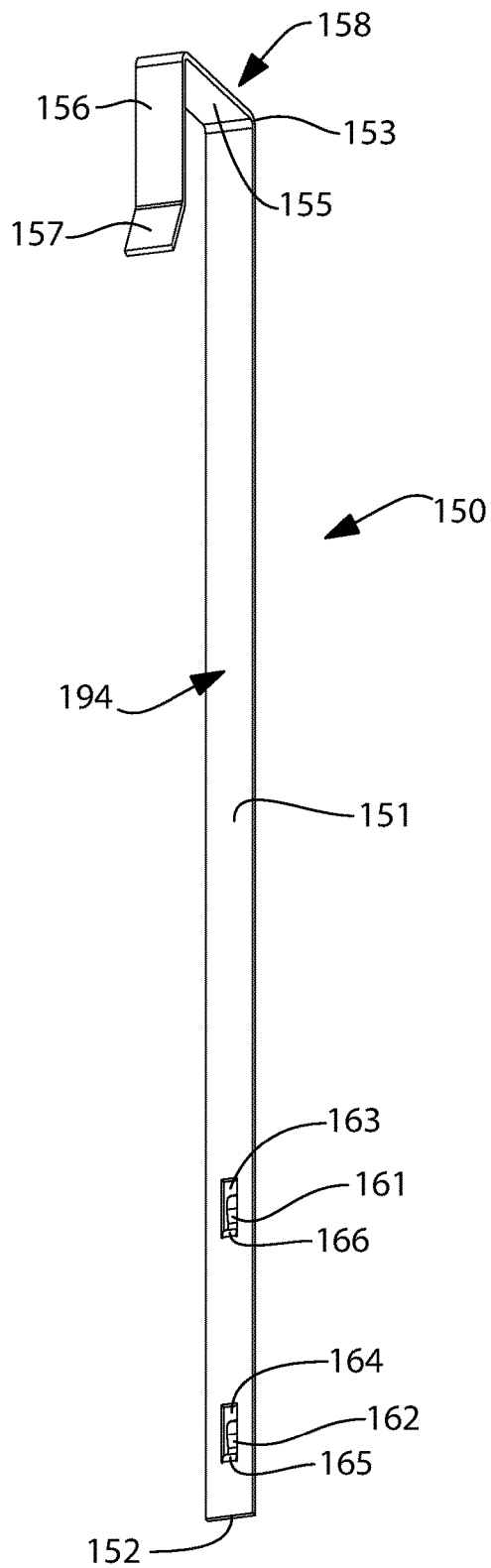


FIG. 3B

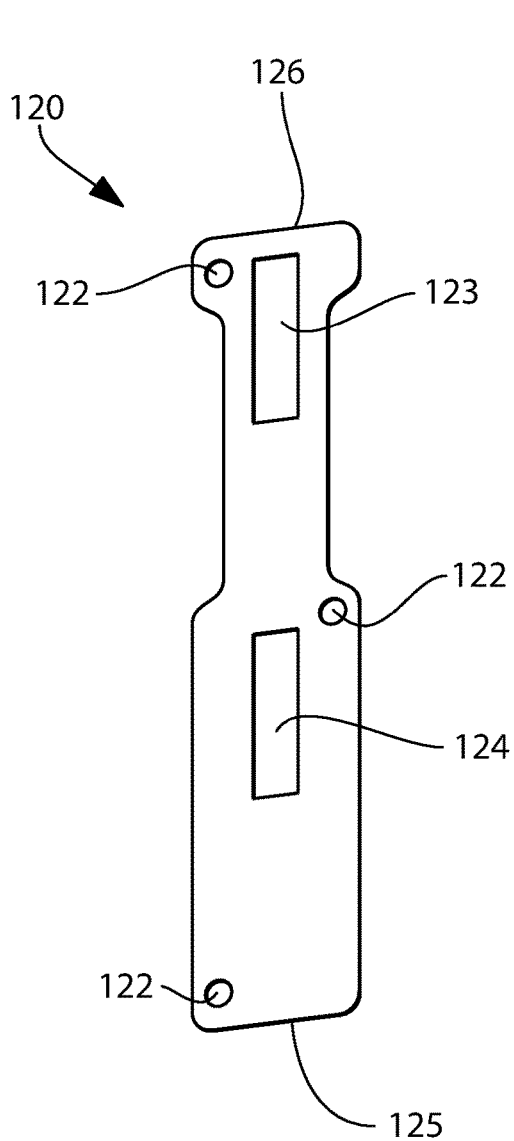


FIG. 4A

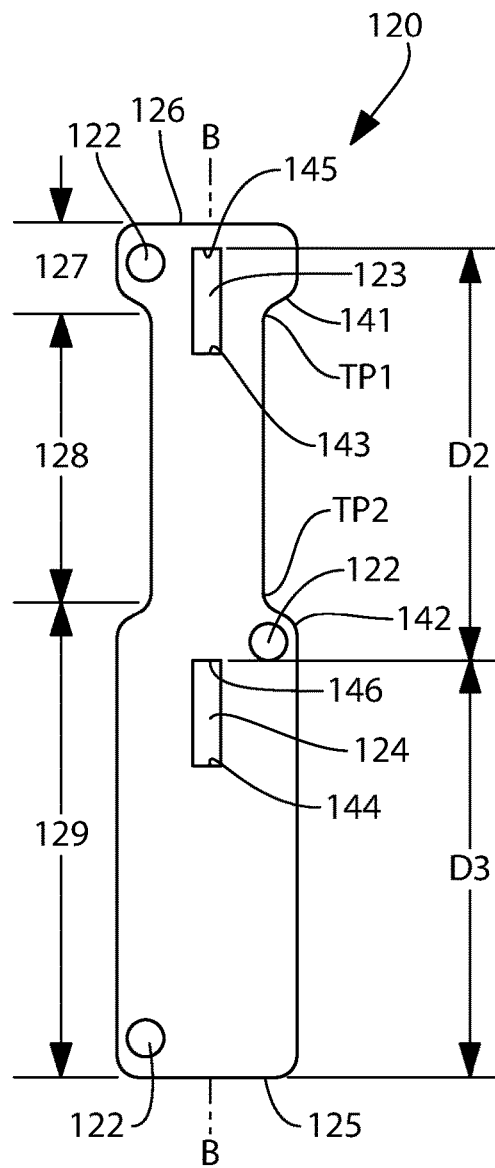
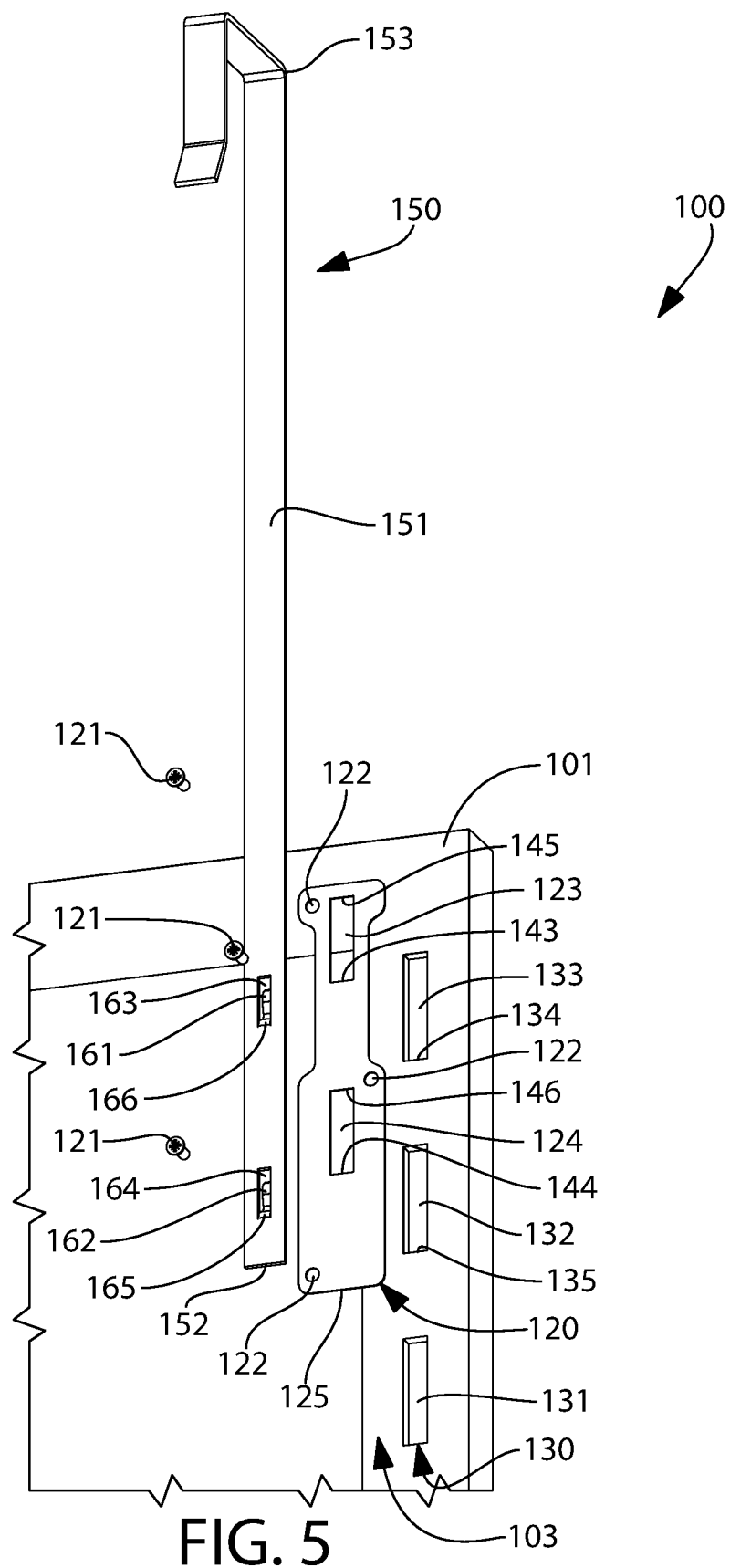


FIG. 4B





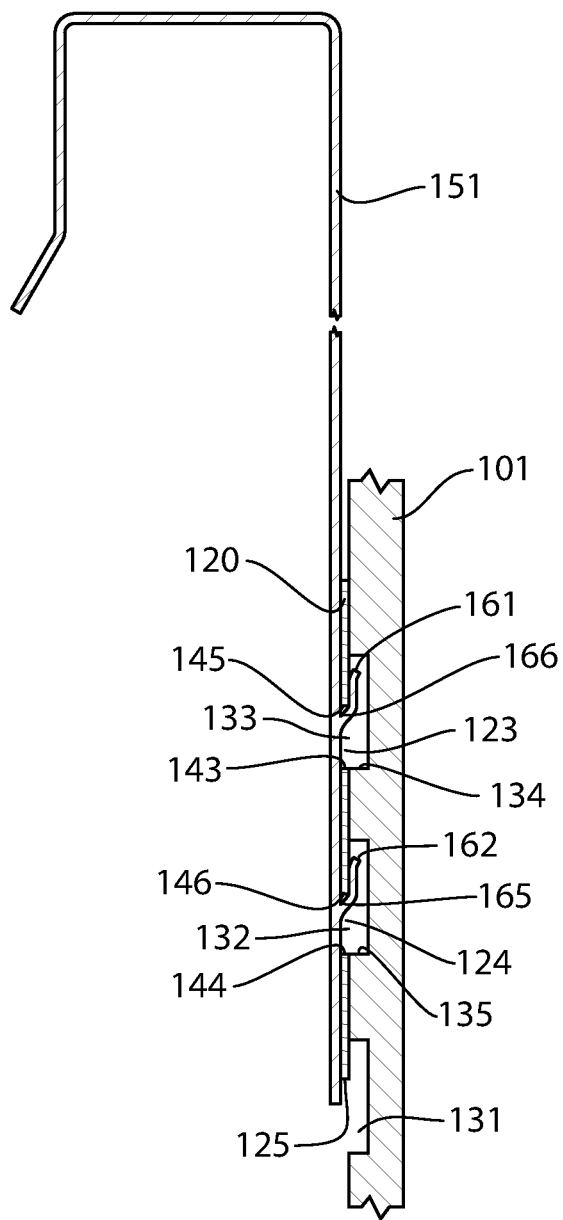


FIG. 6

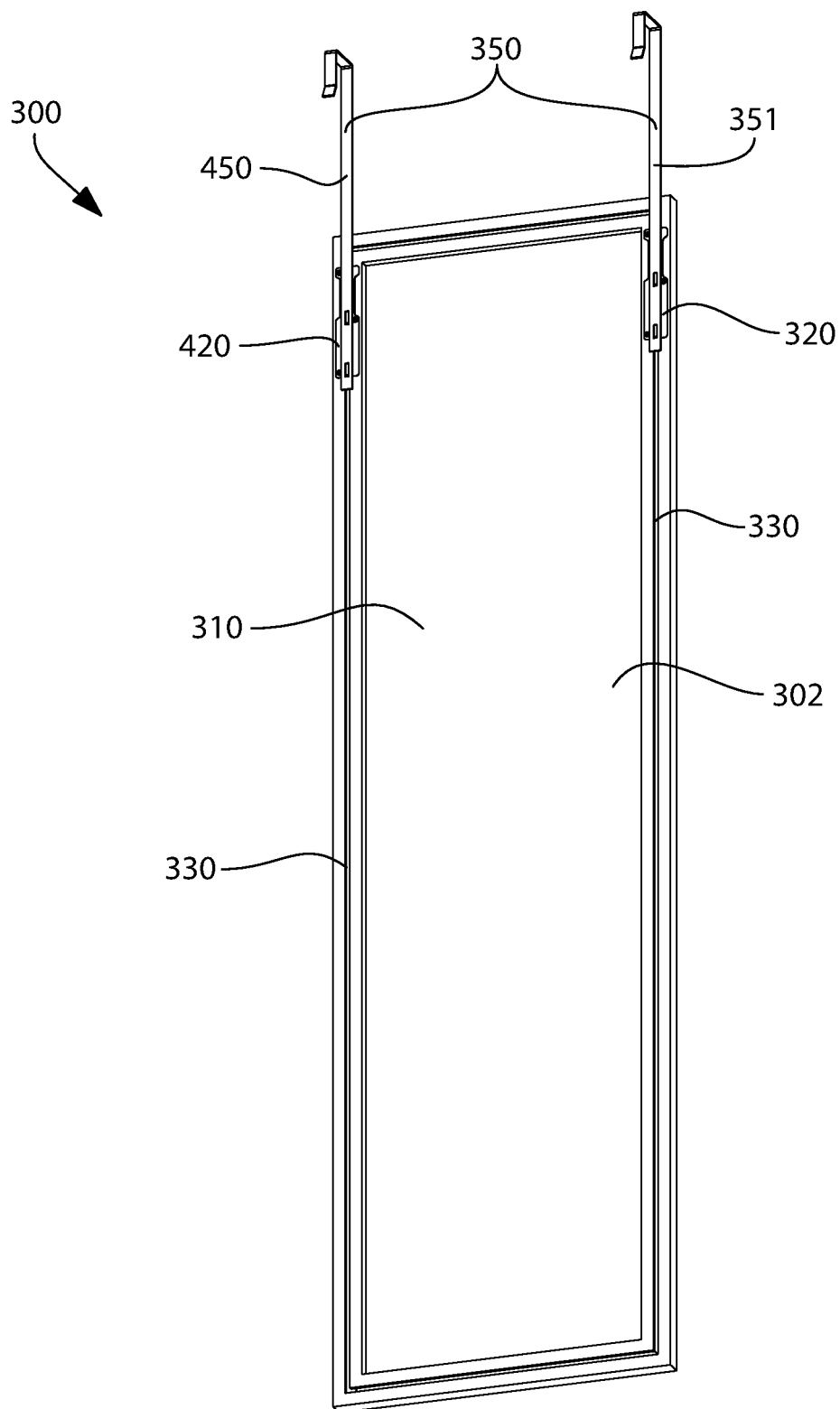


FIG. 7

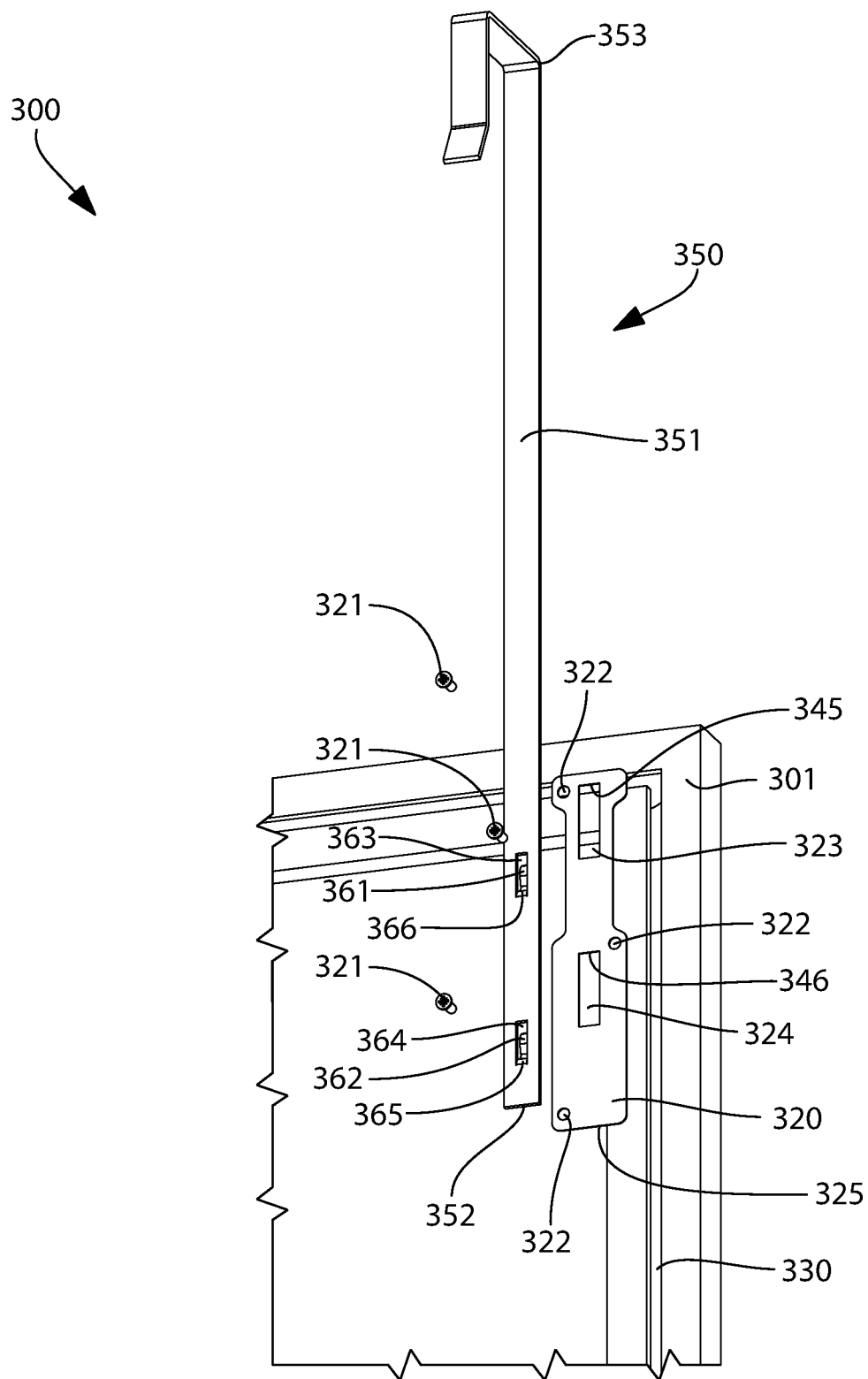


FIG. 8

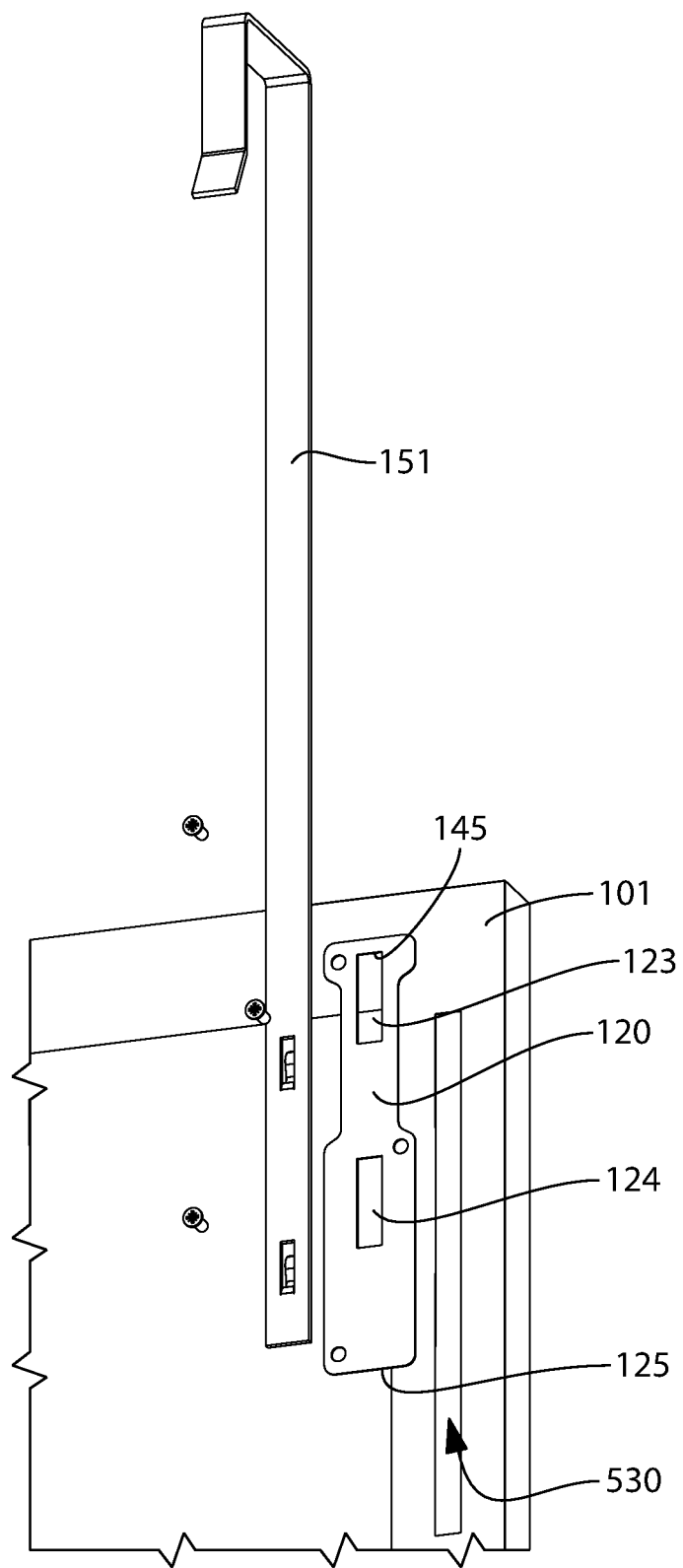


FIG. 9

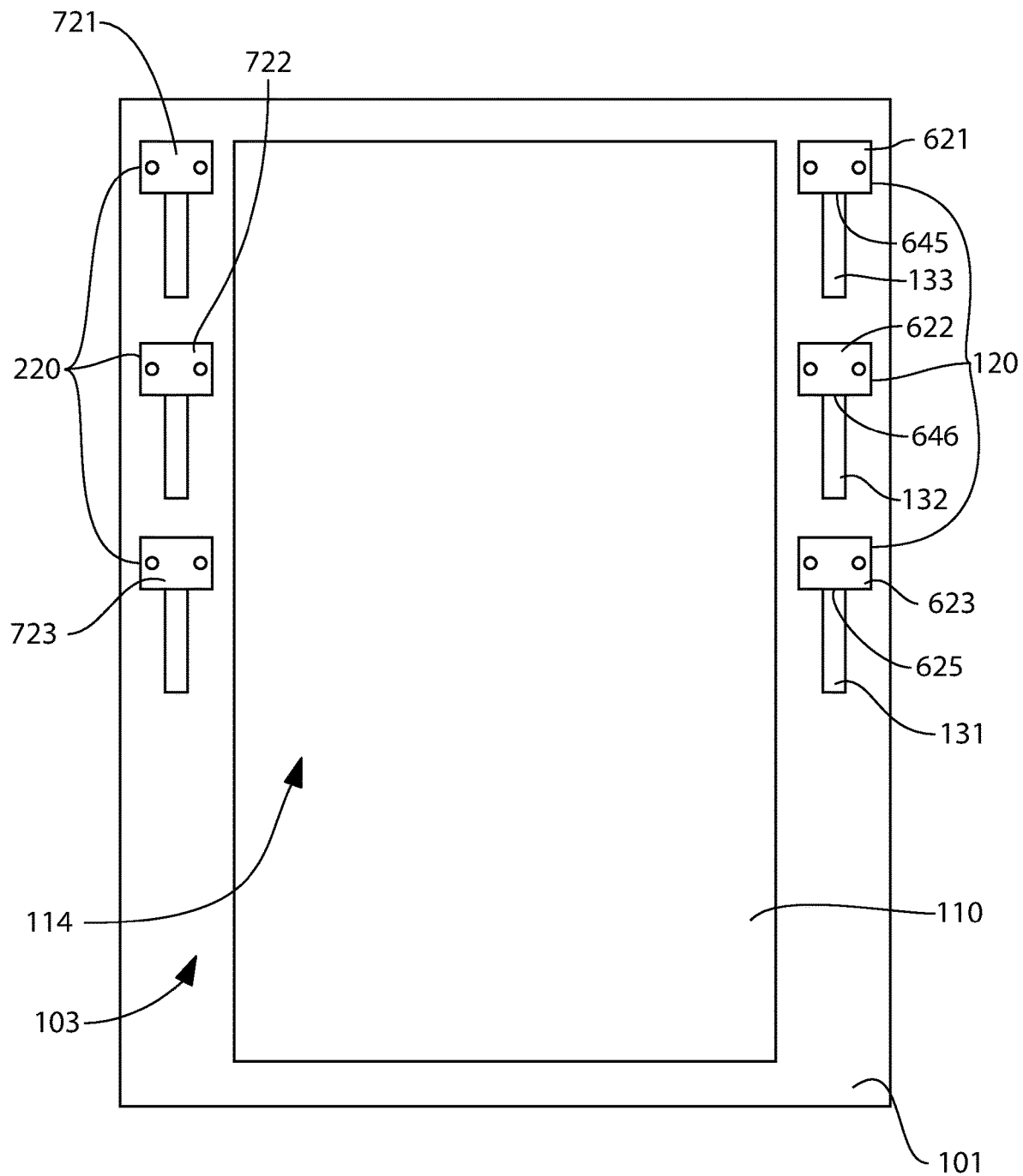


FIG. 10

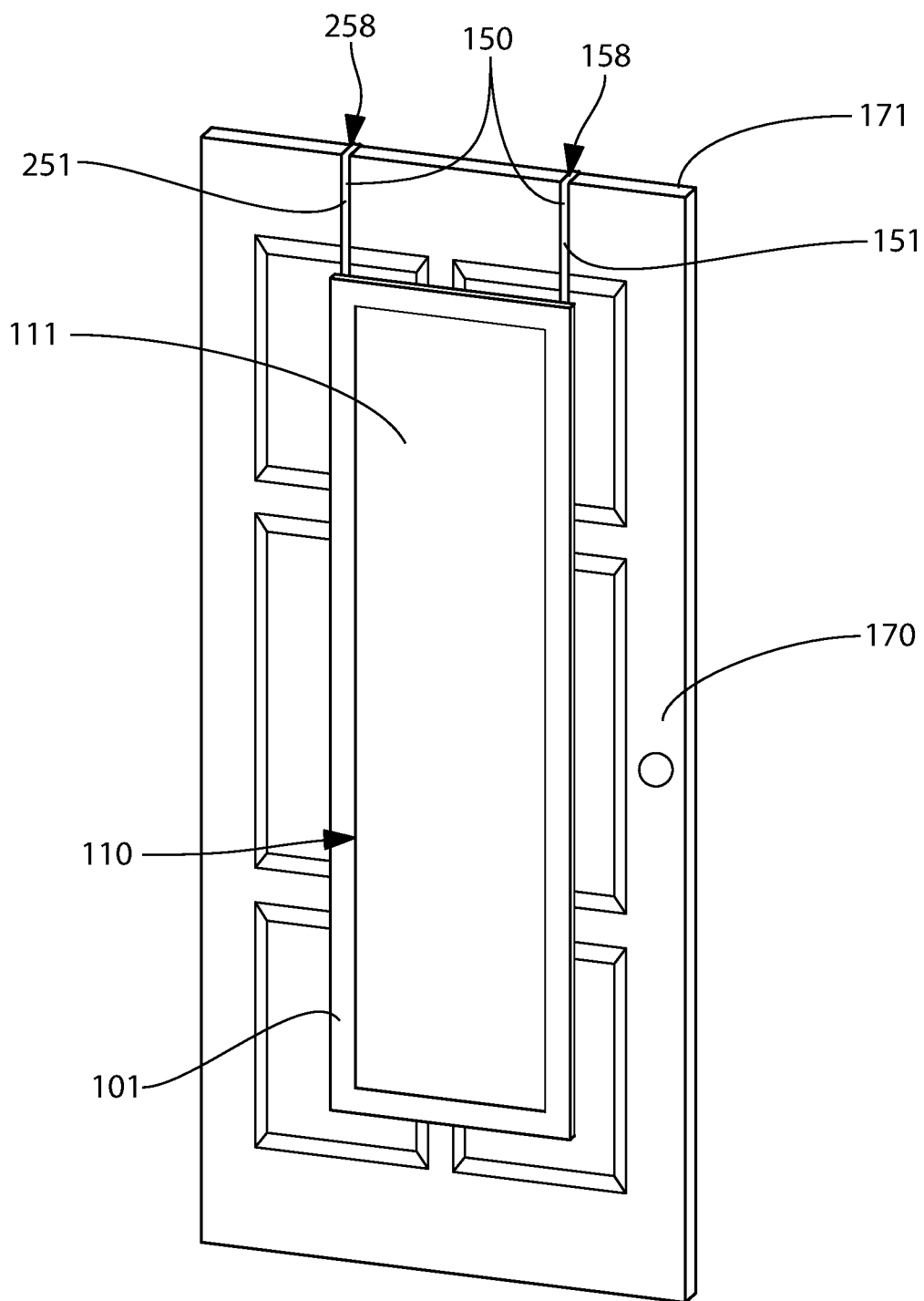


FIG. 11

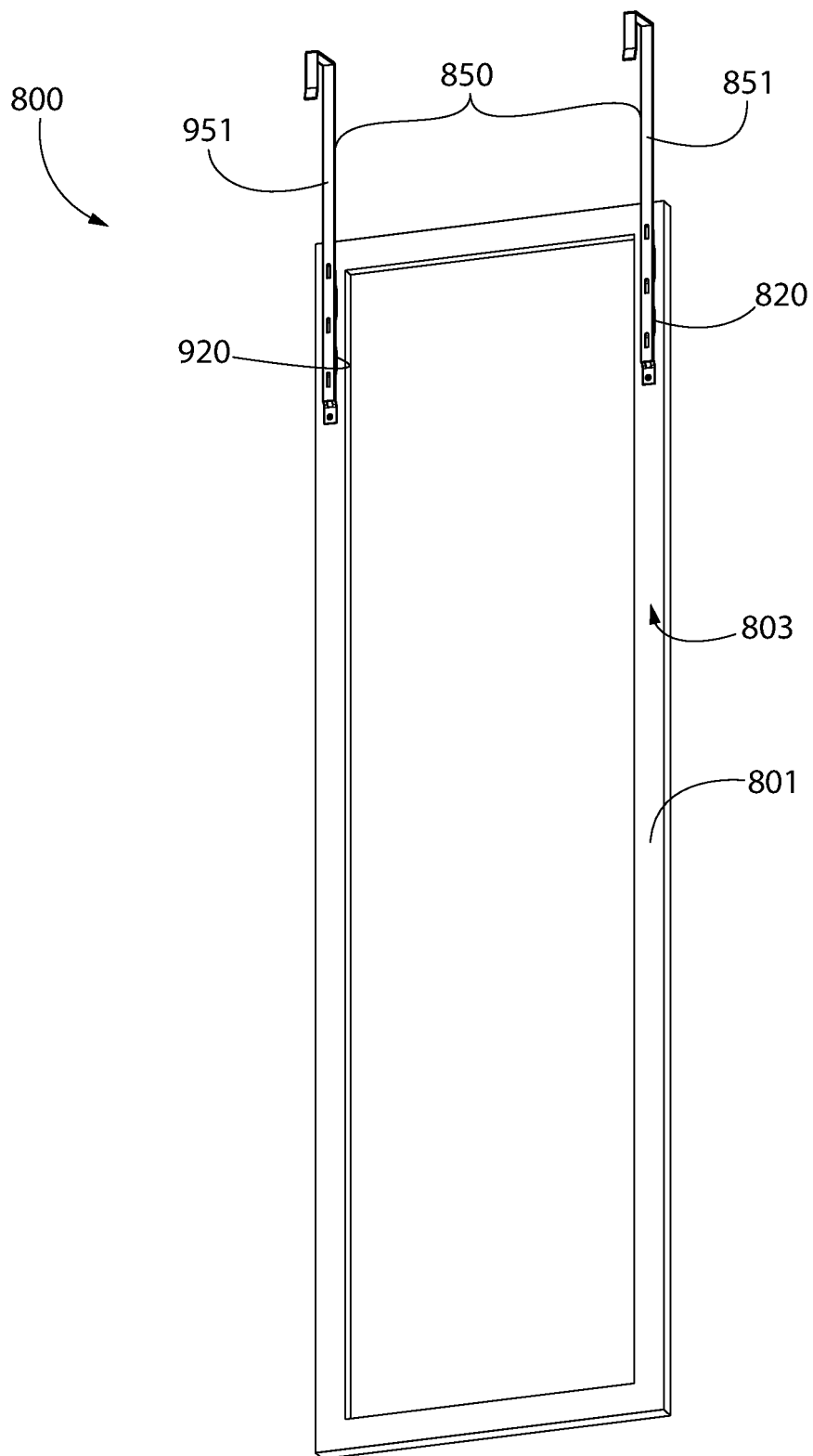
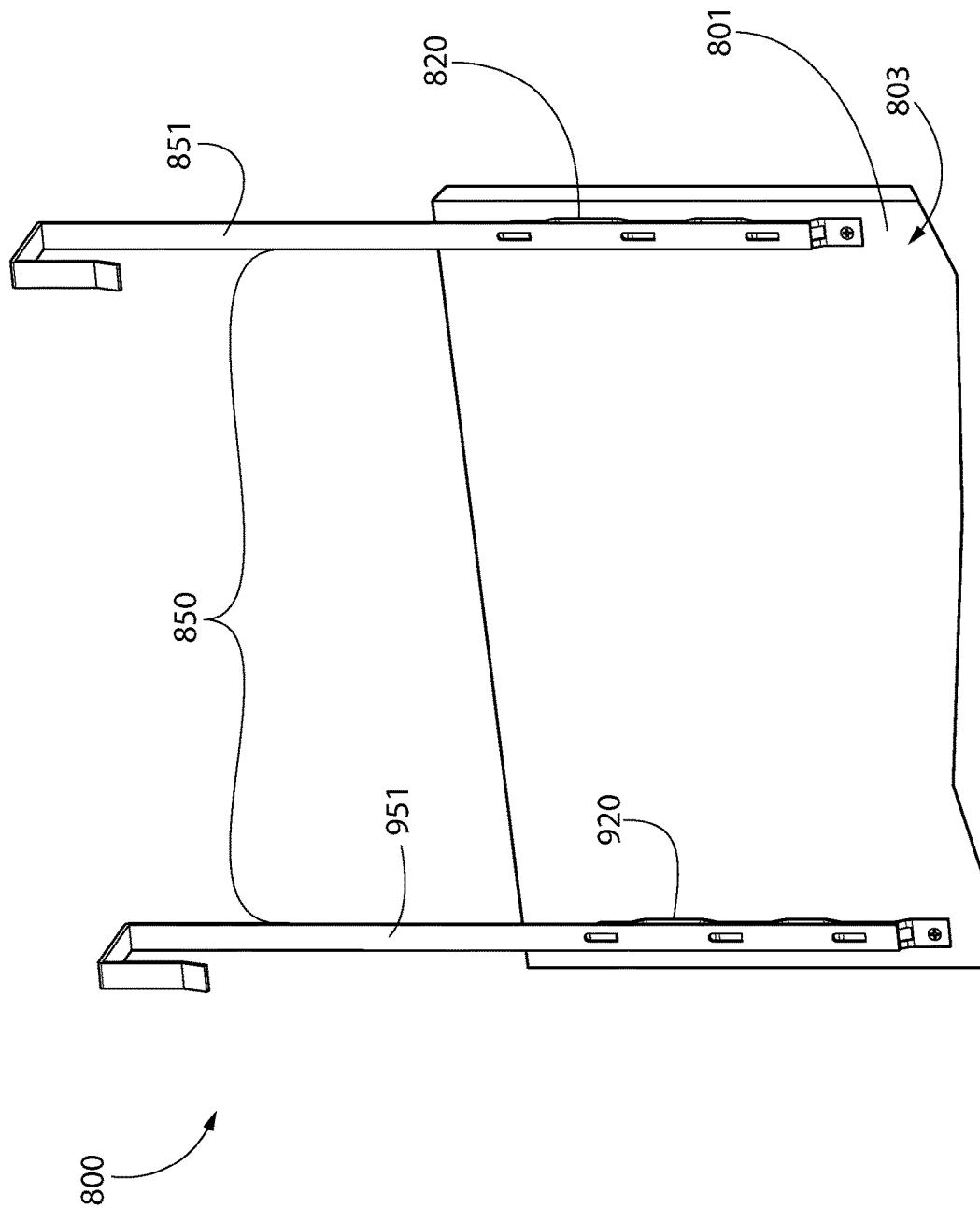


FIG. 12





**FIG. 13**

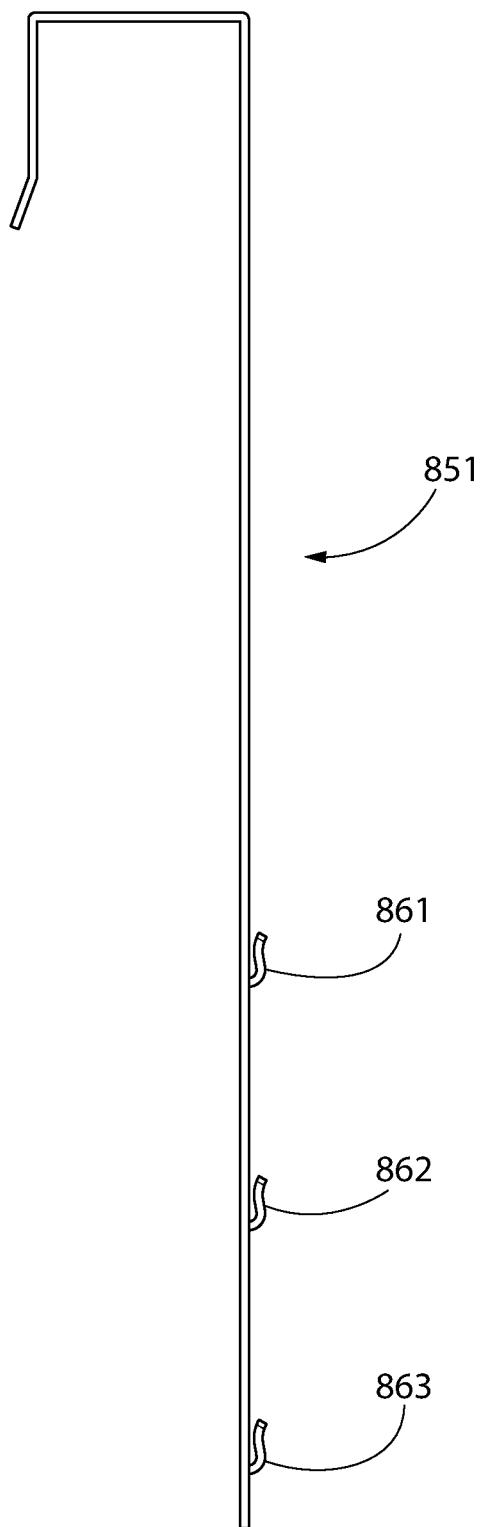


FIG. 14A

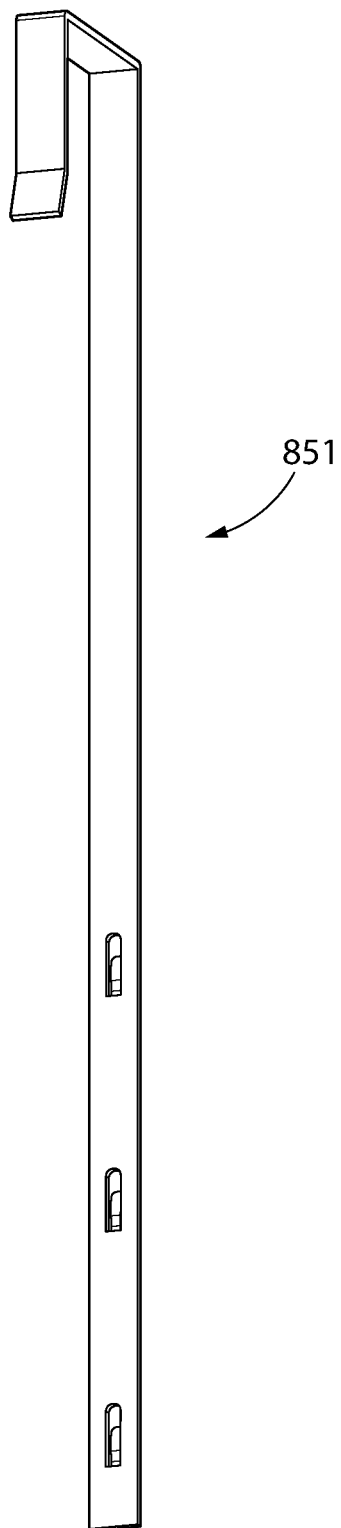


FIG. 14B

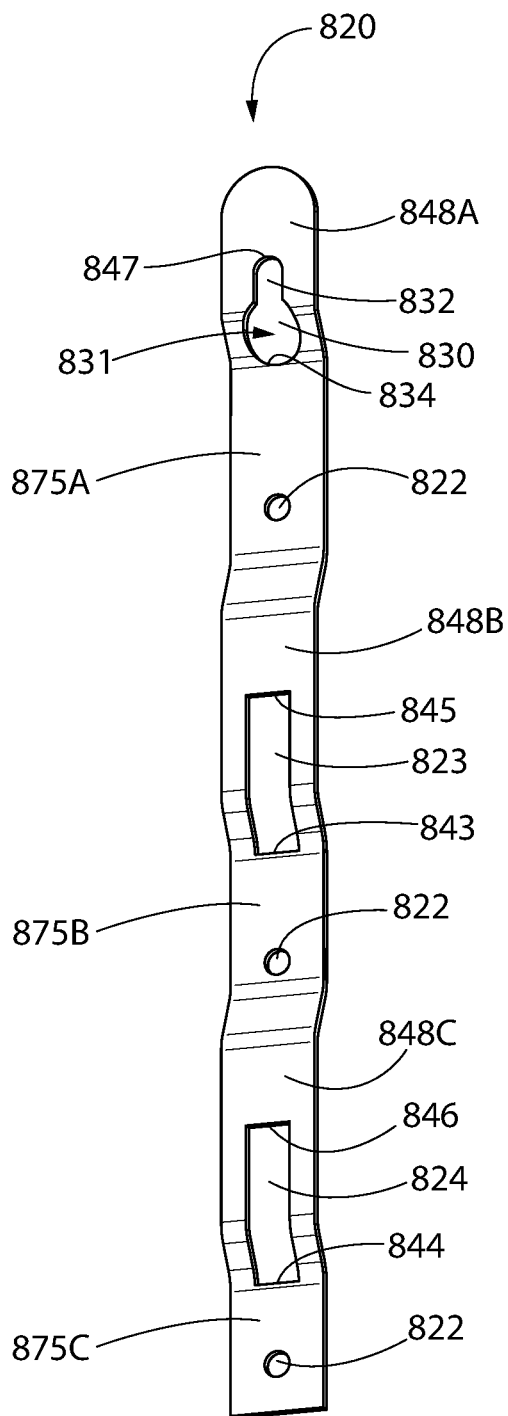


FIG. 15A

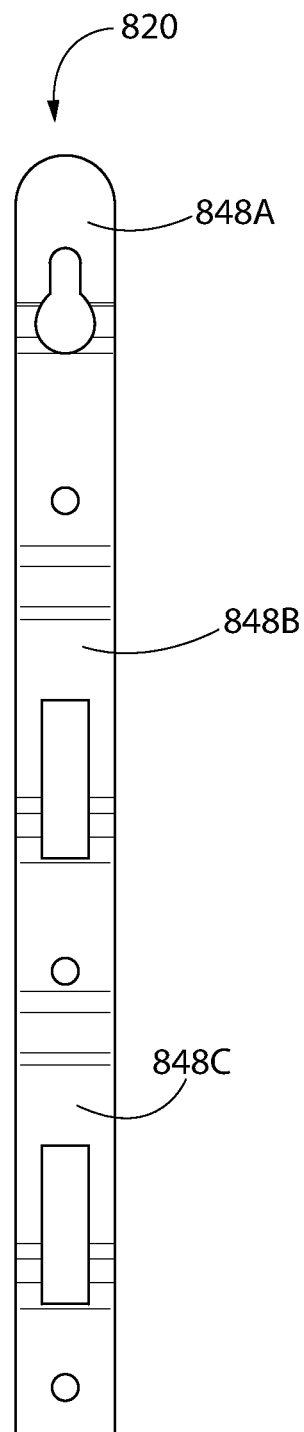


FIG. 15B

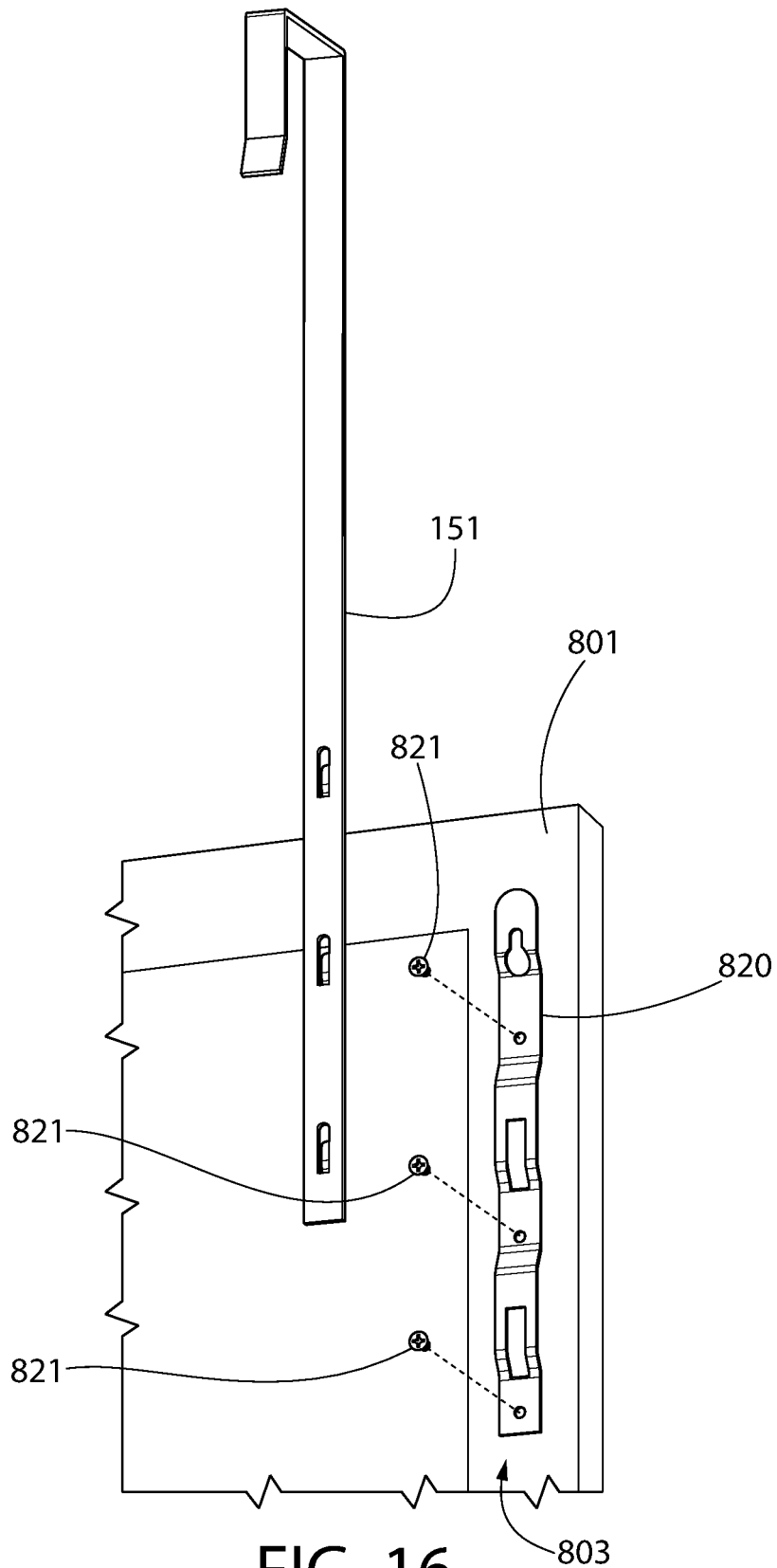


FIG. 16

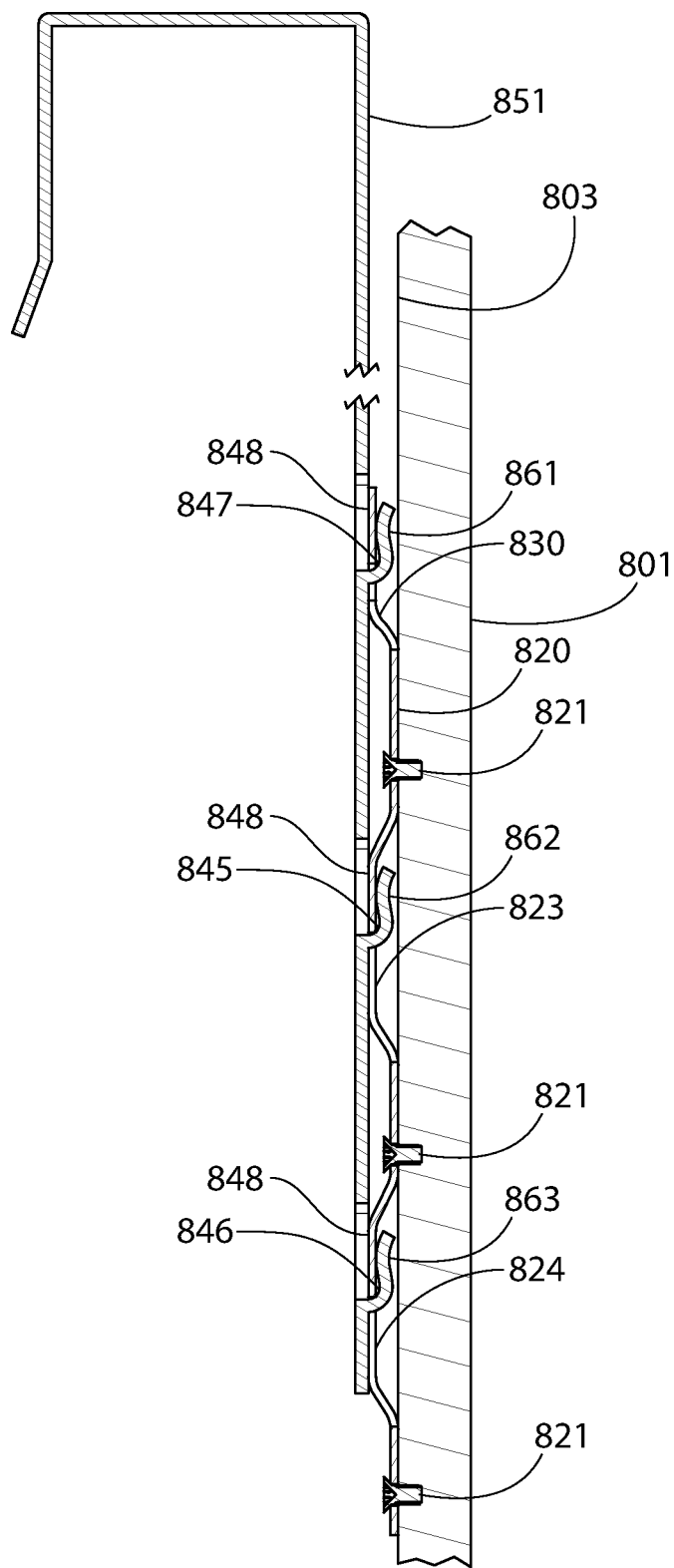


FIG. 17A

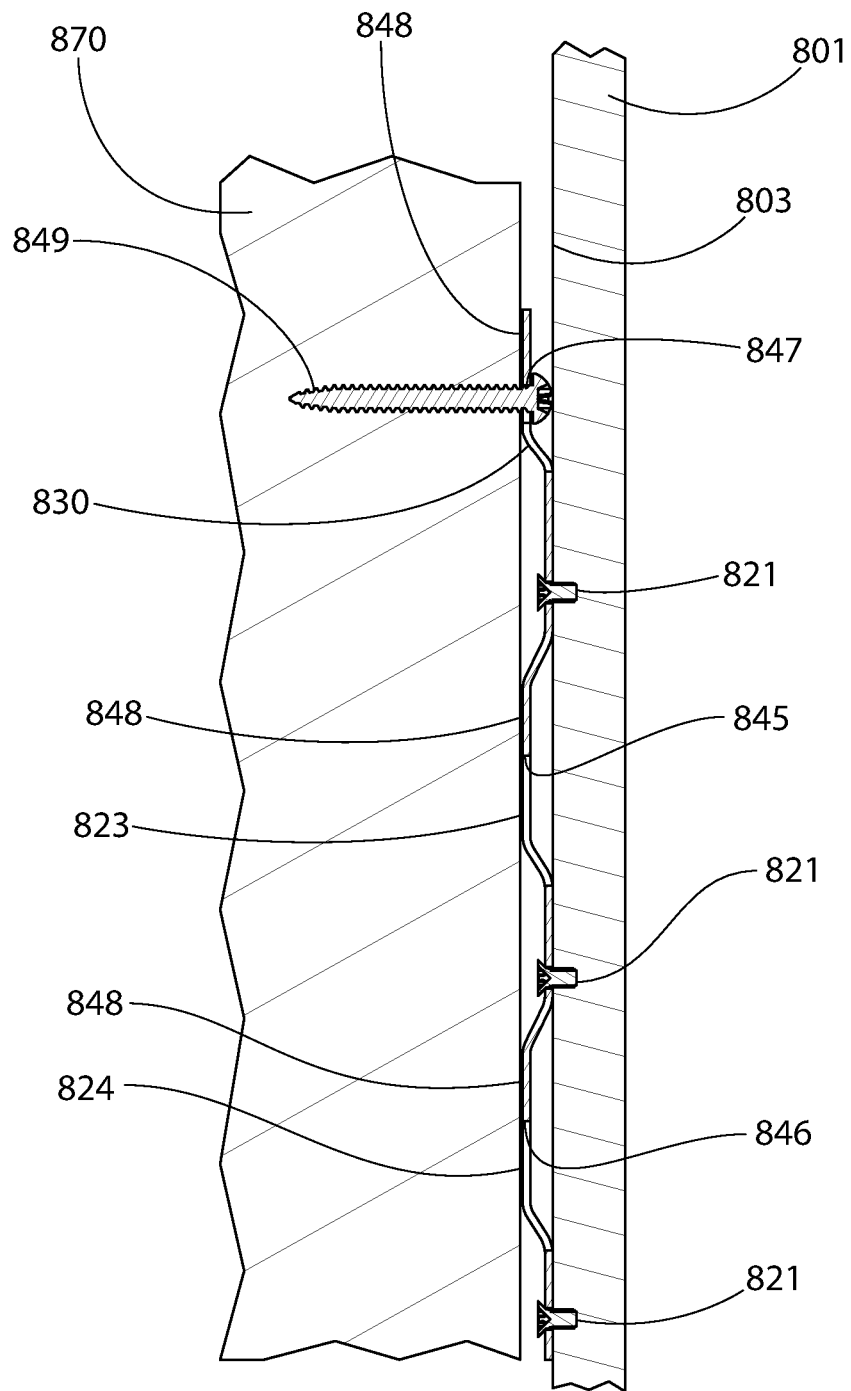


FIG. 17B

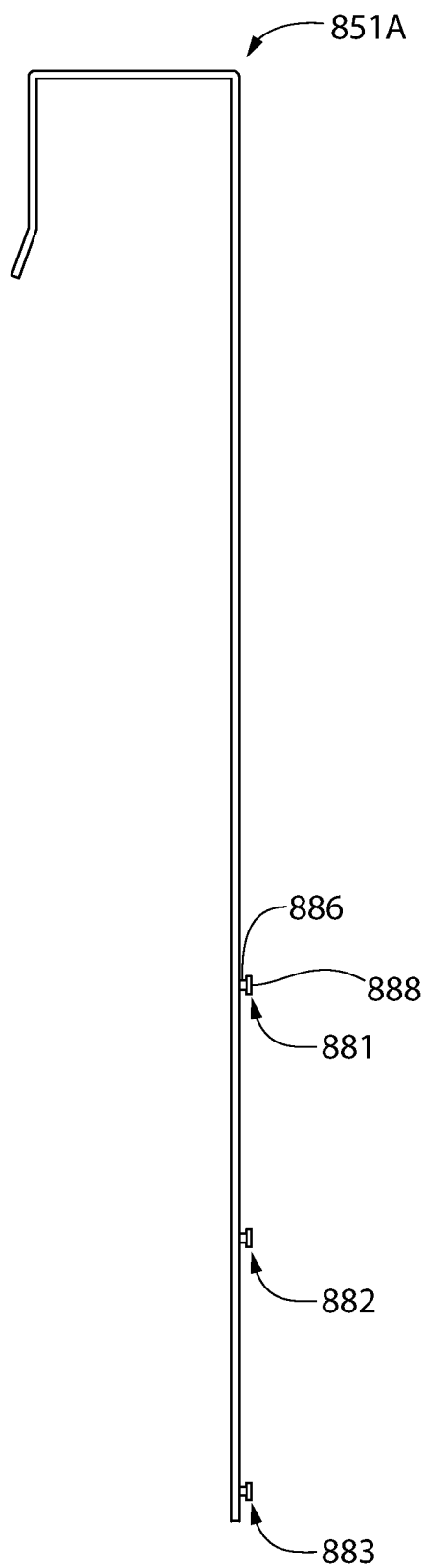


FIG. 18A

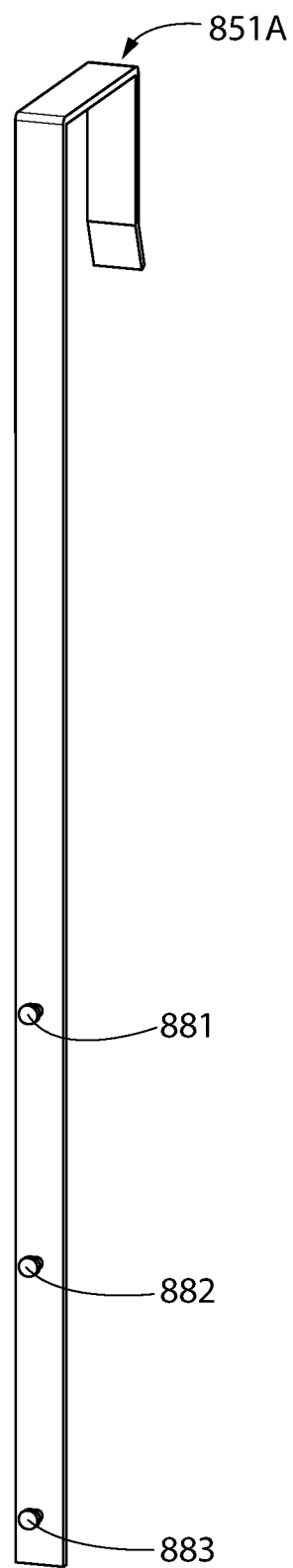


FIG. 18B

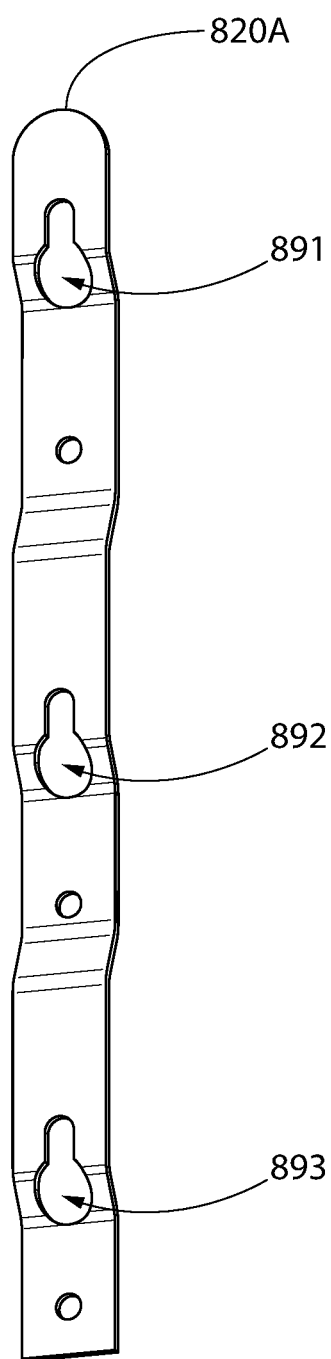


FIG. 19A

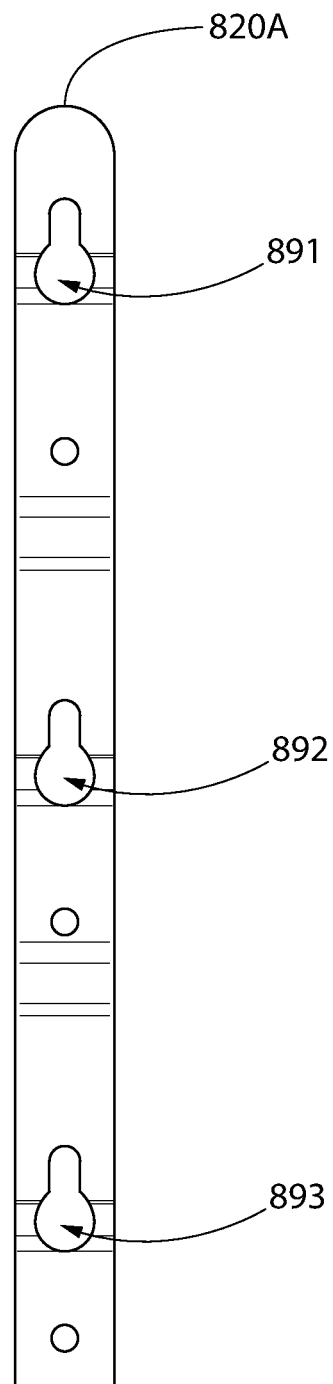


FIG. 19B



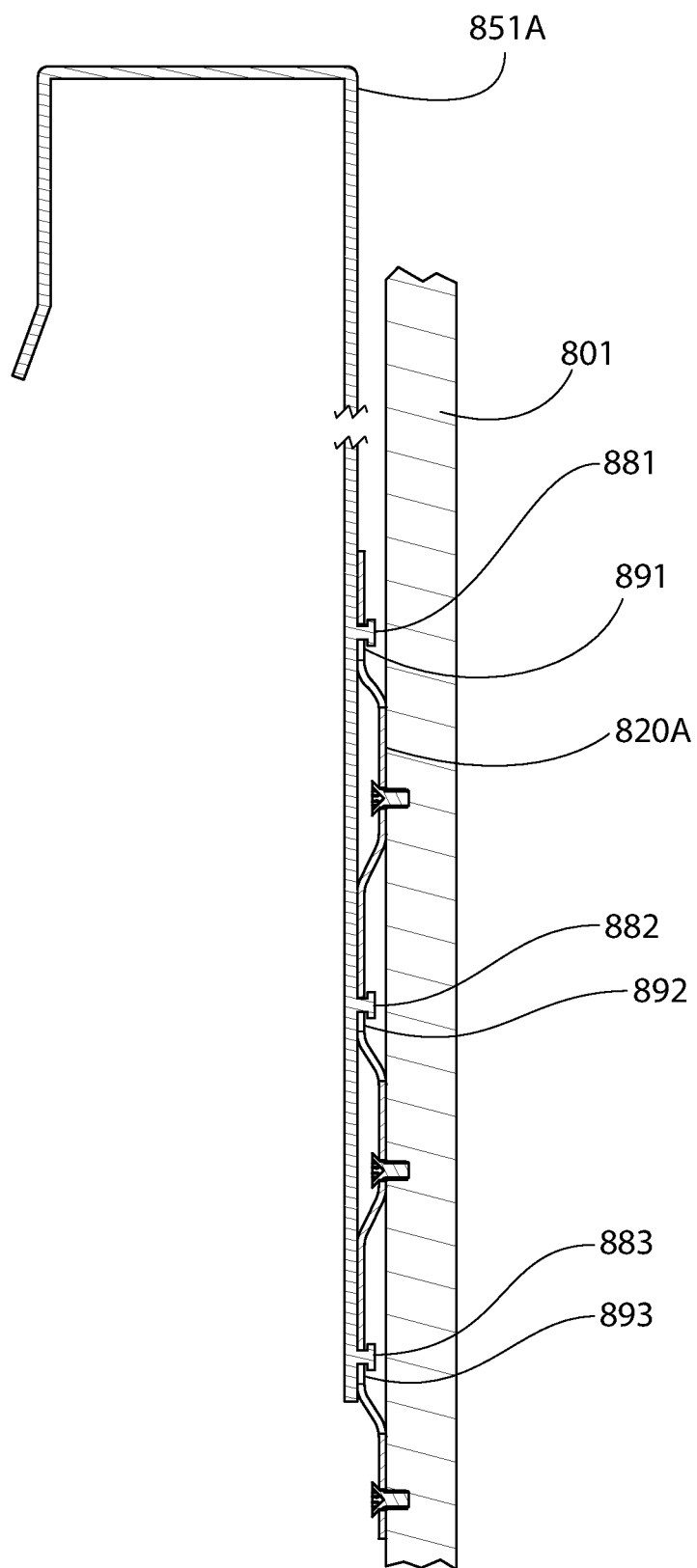


FIG. 20

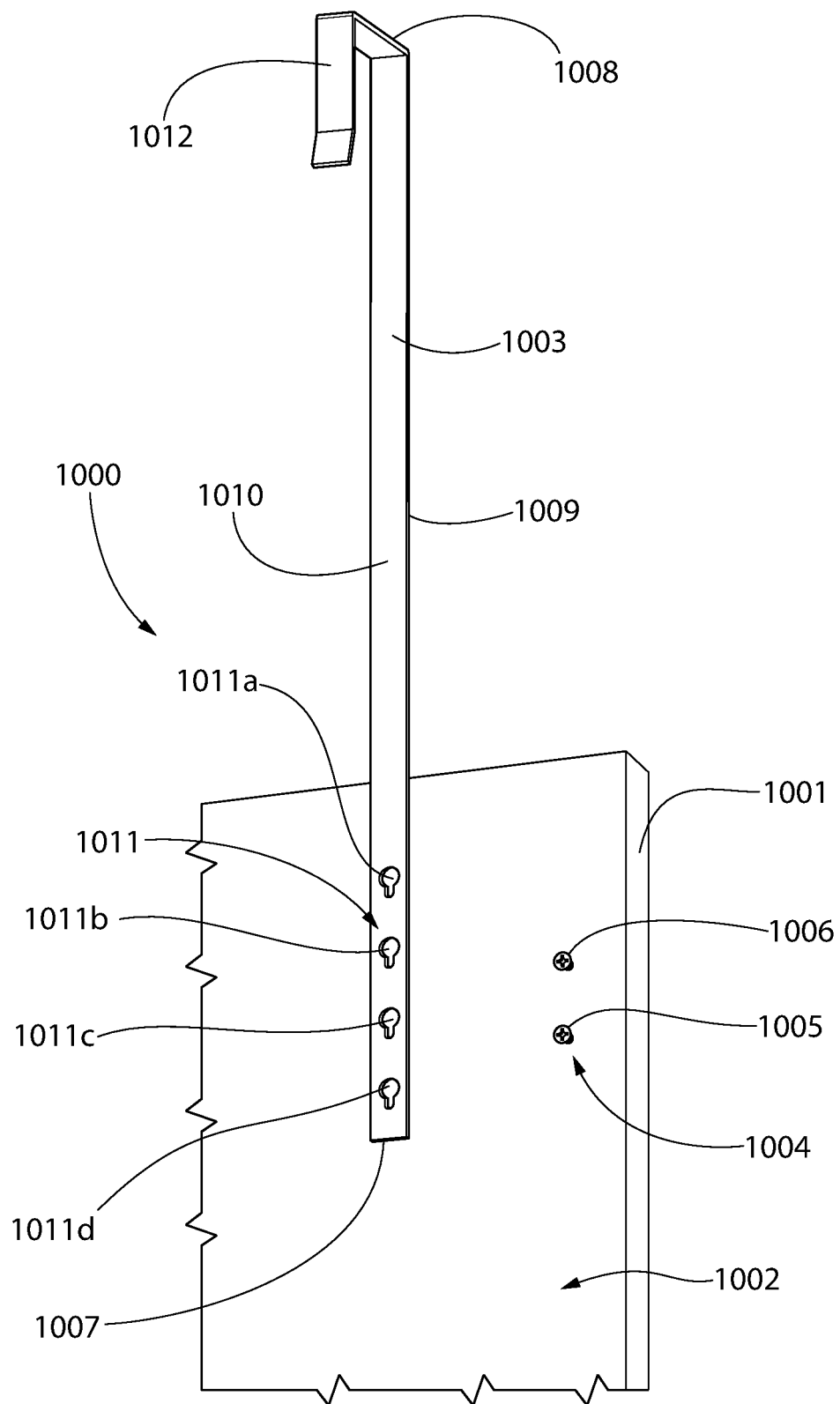


FIG. 21A



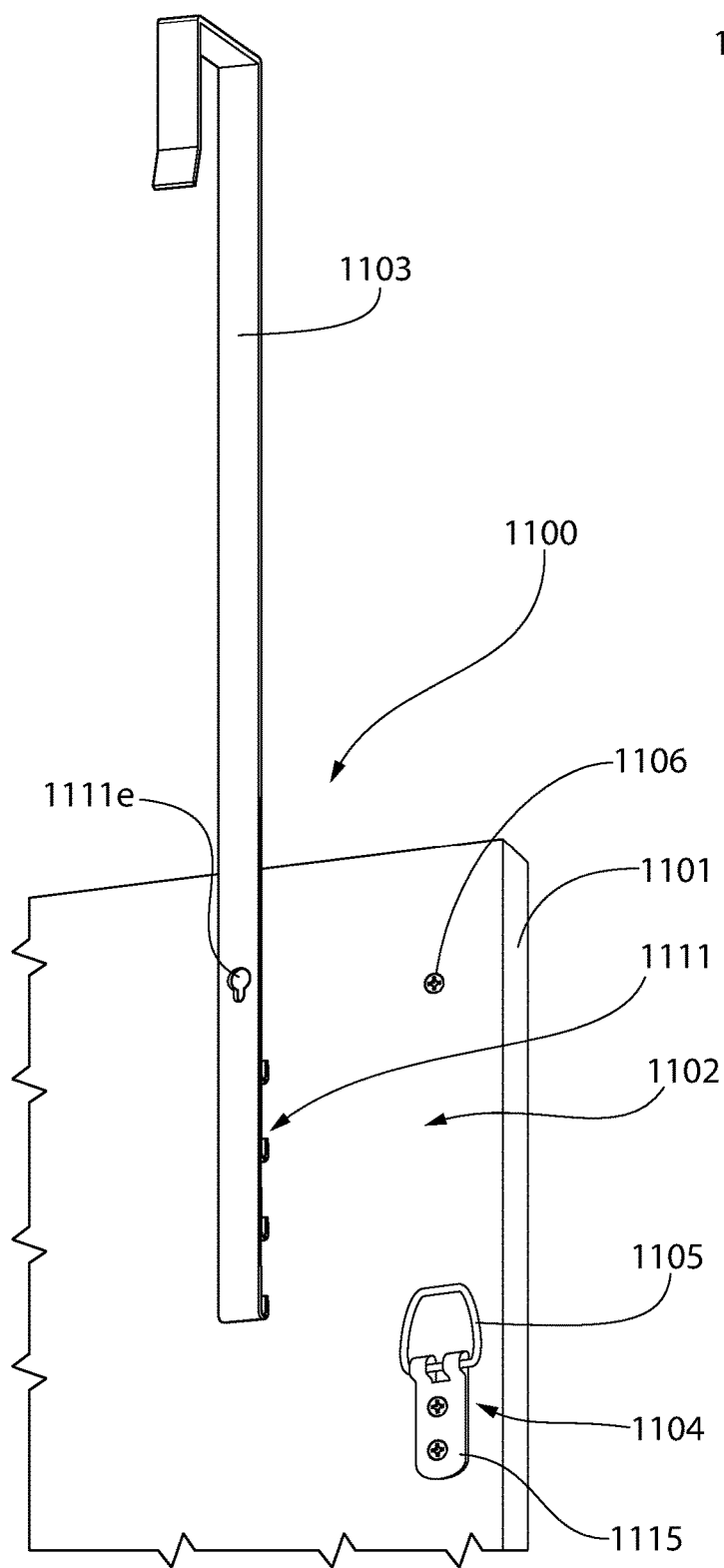


FIG. 22A

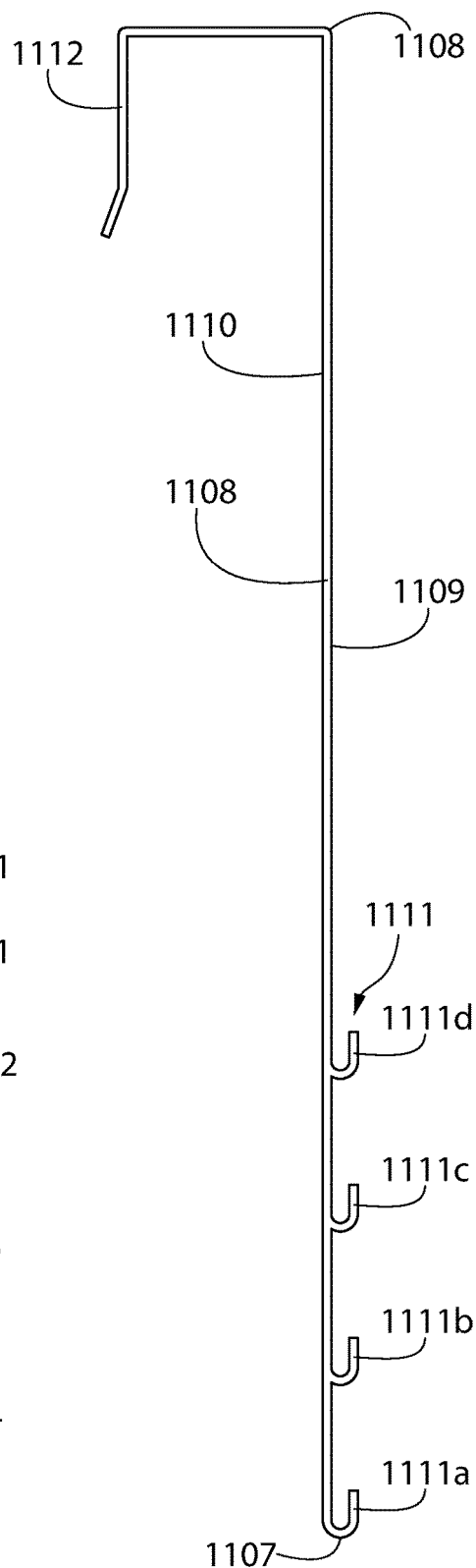


FIG. 22B

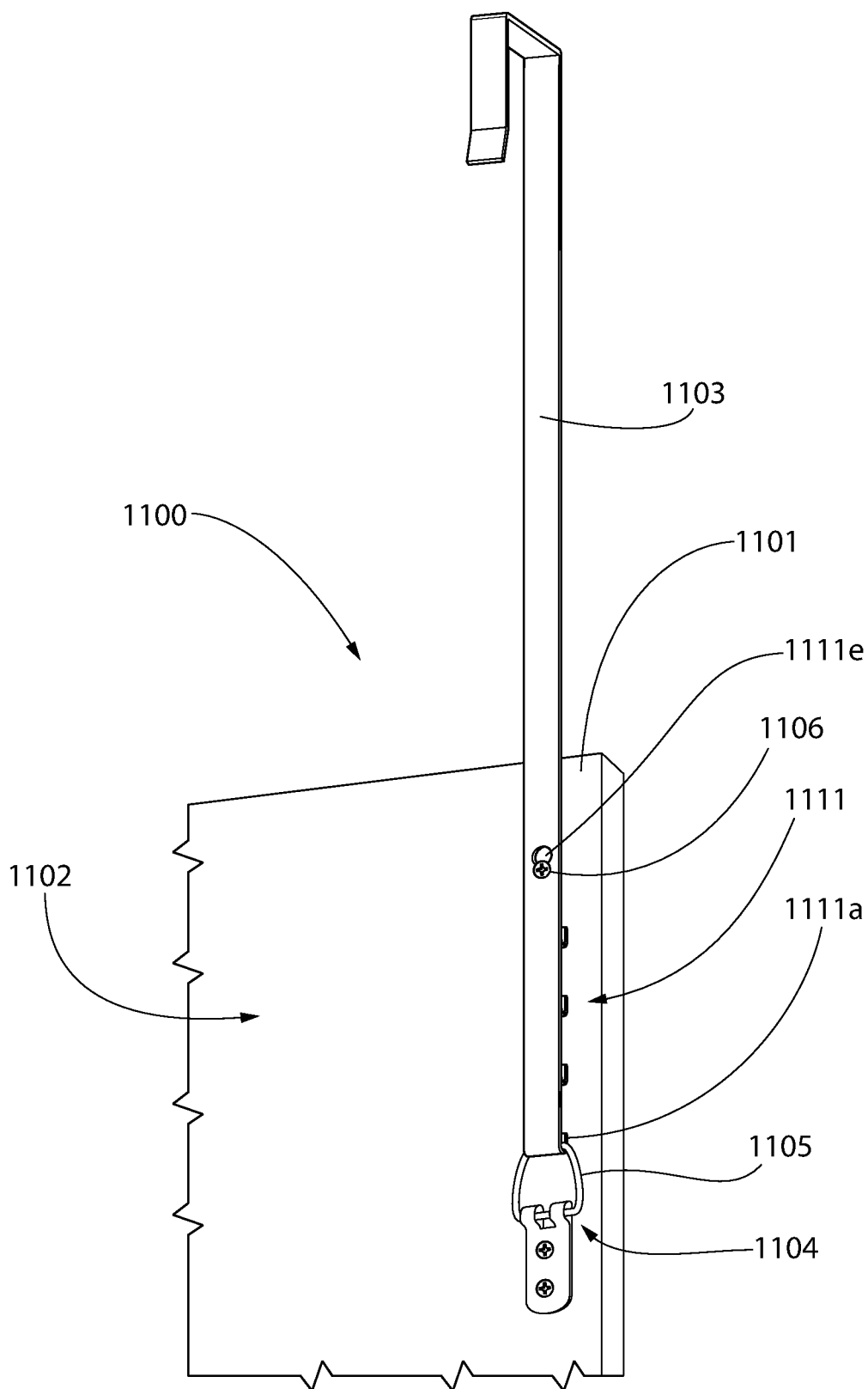


FIG. 22C

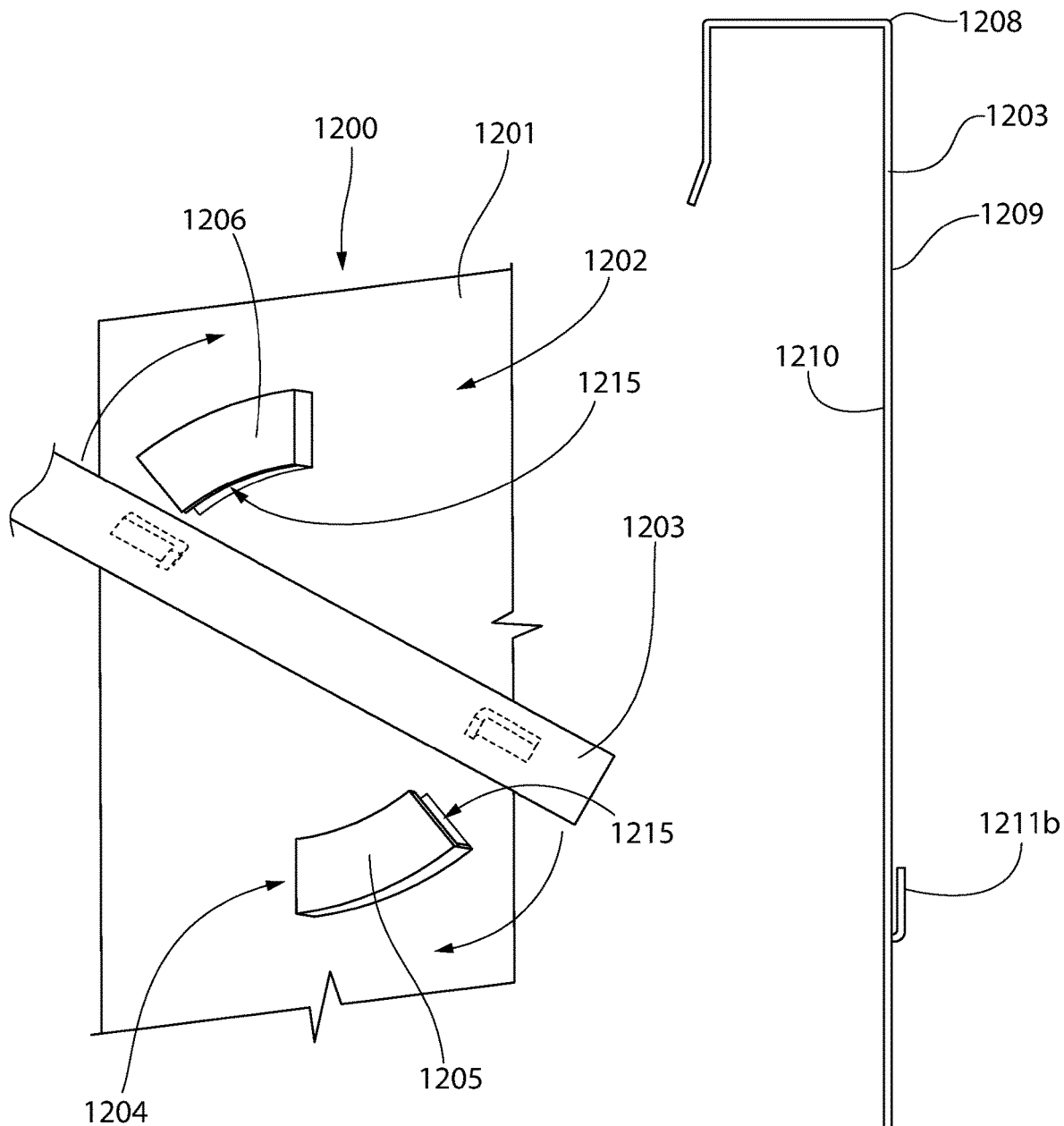


FIG. 23A

FIG. 23B

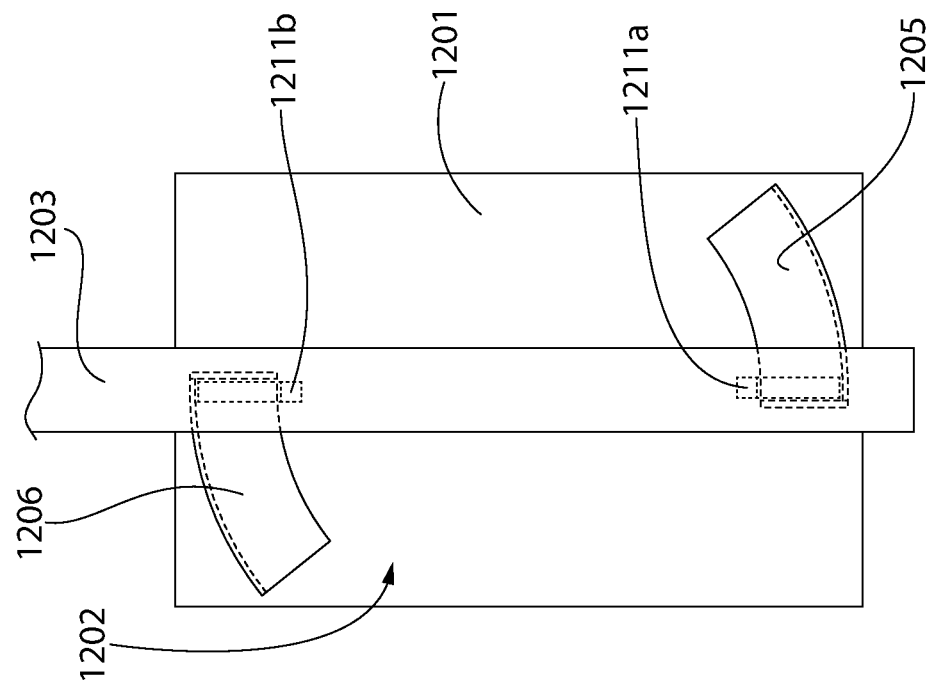


FIG. 23C

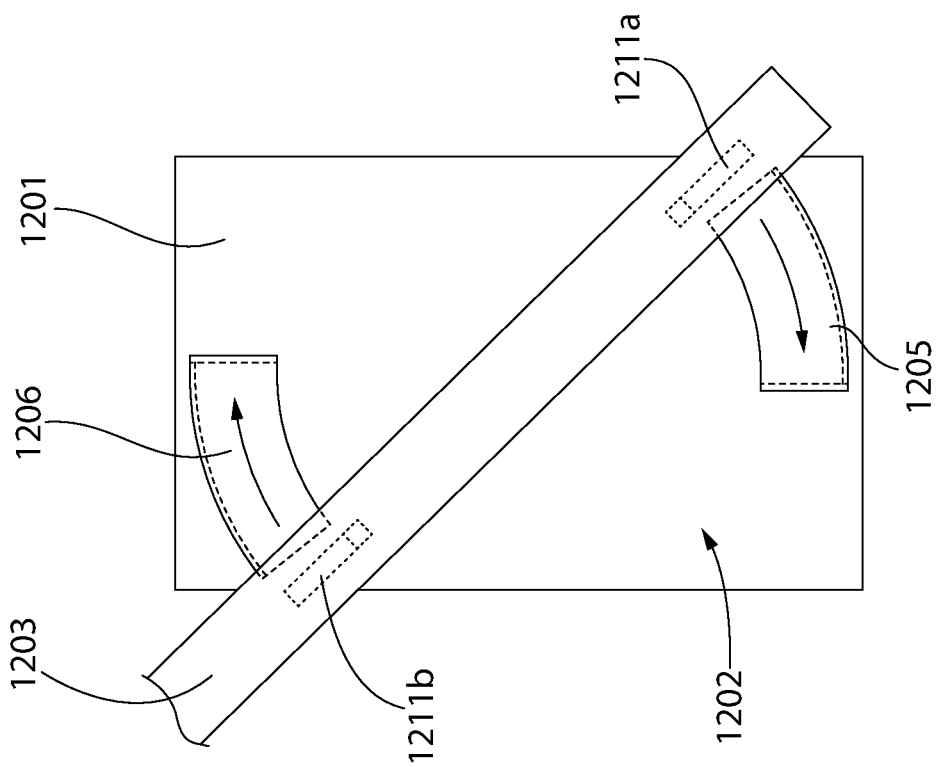


FIG. 23D

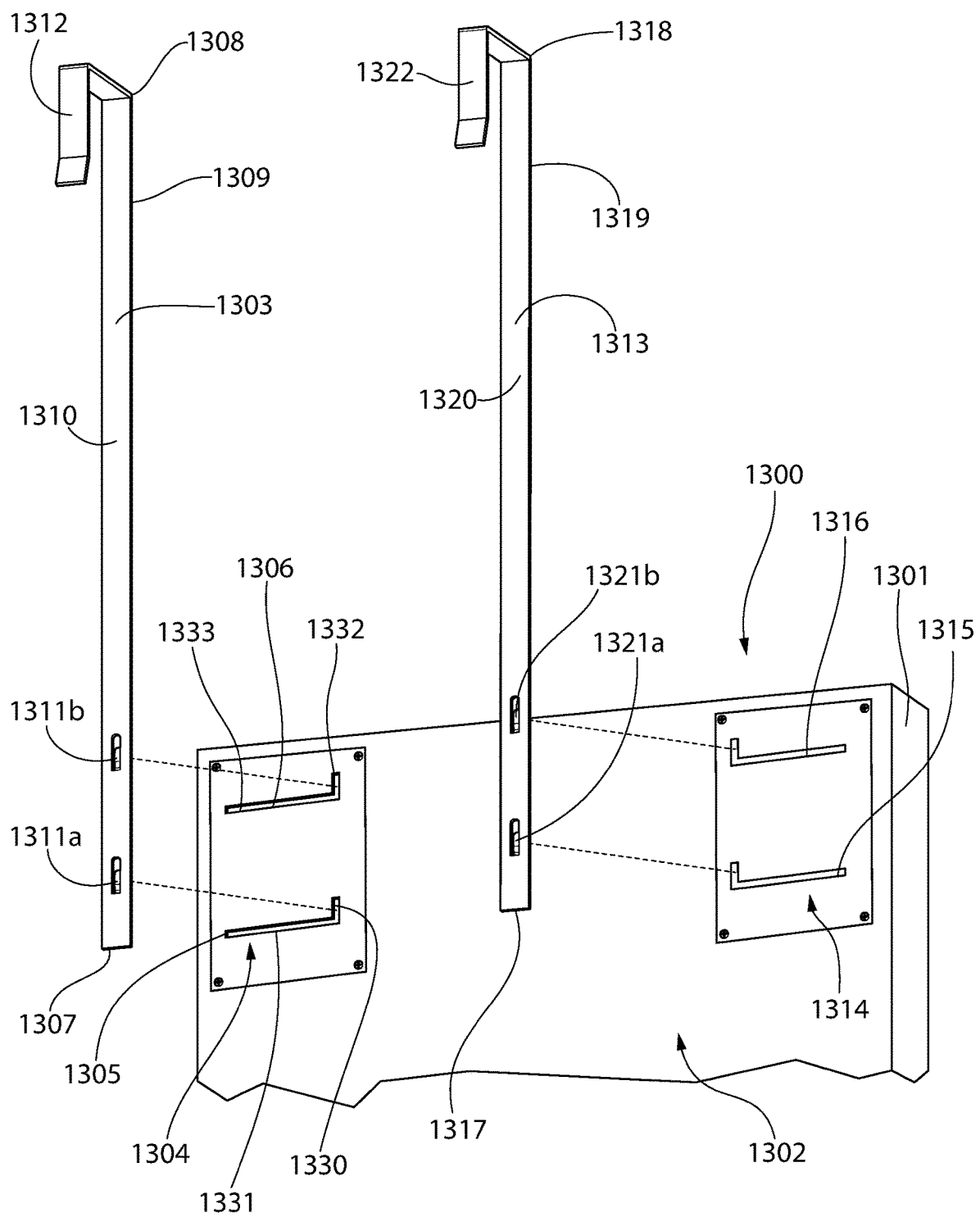


FIG. 24A



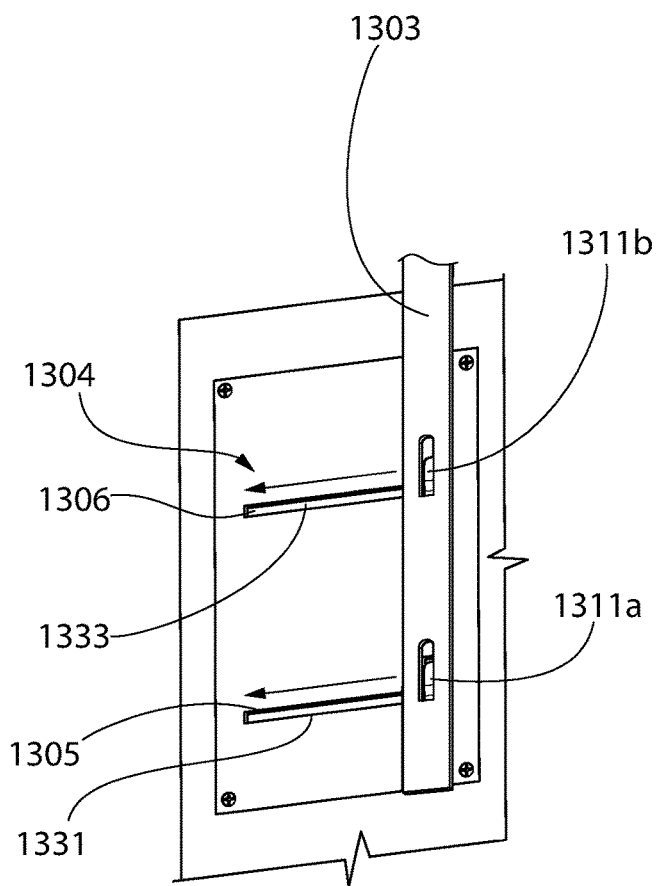


FIG. 24B

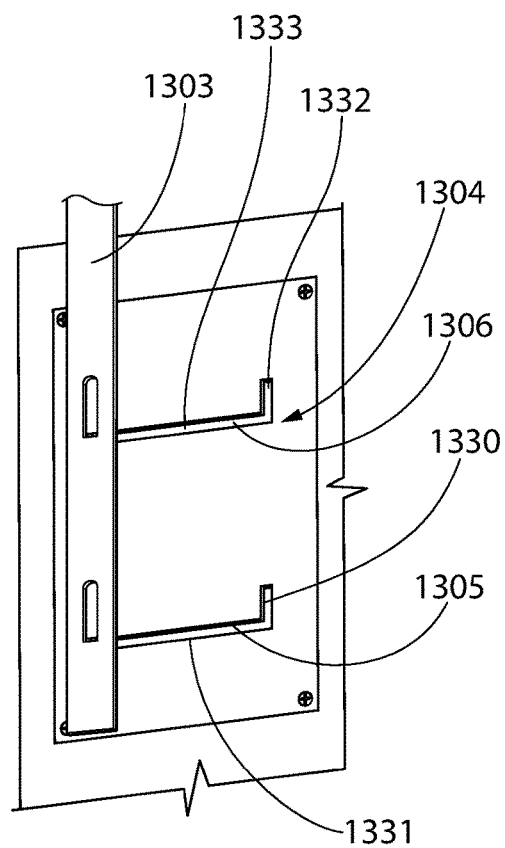


FIG. 24C

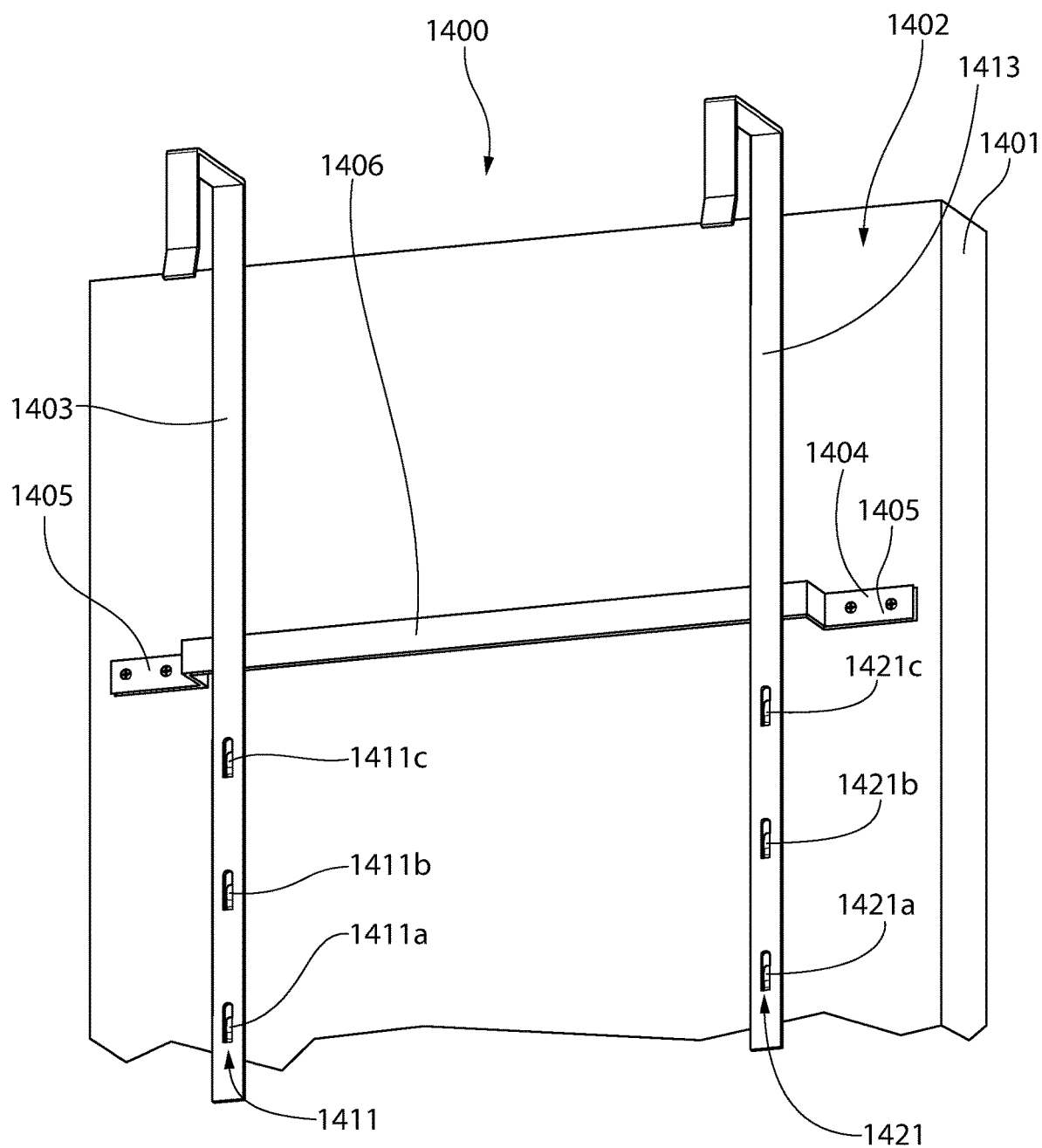


FIG. 25A

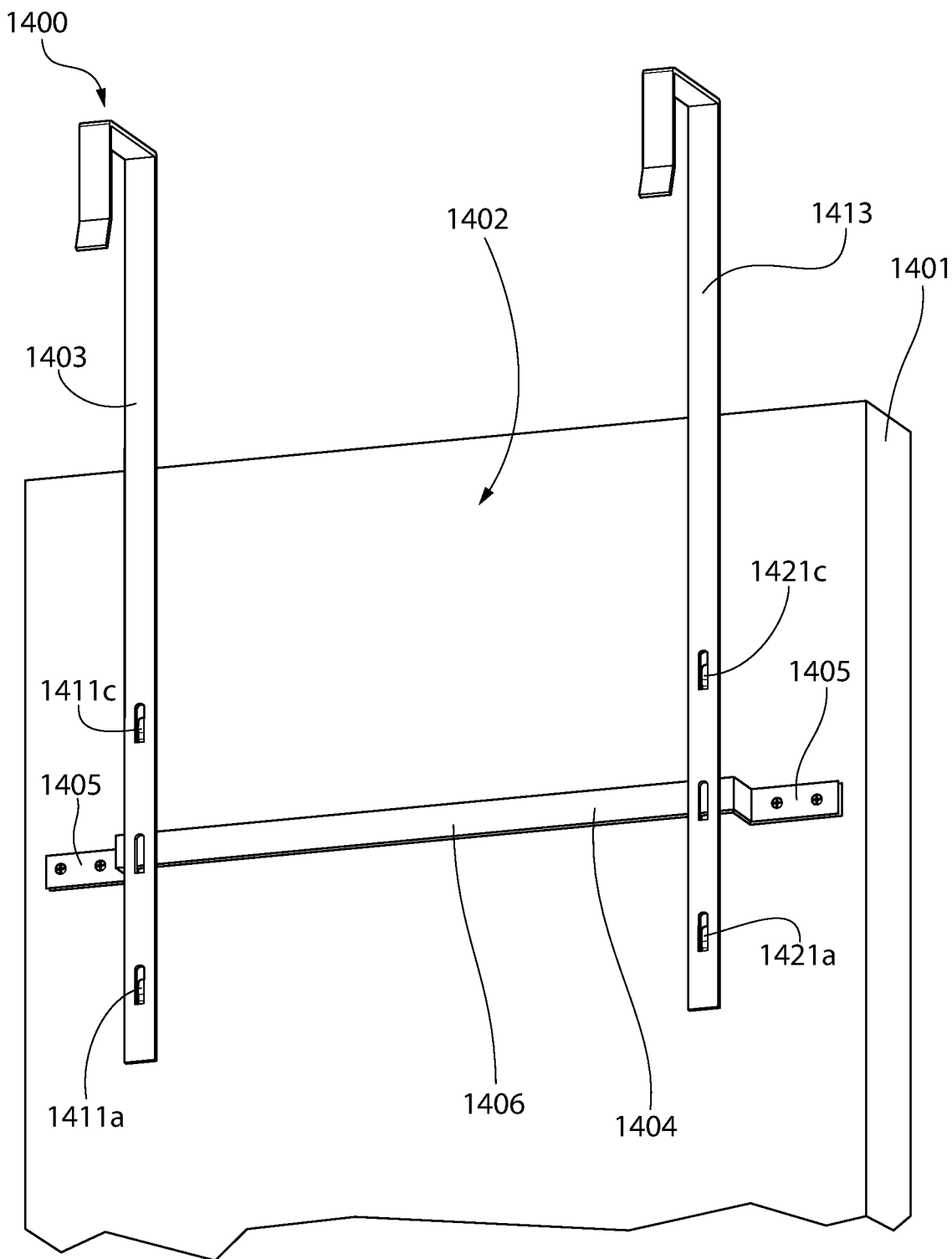


FIG. 25B

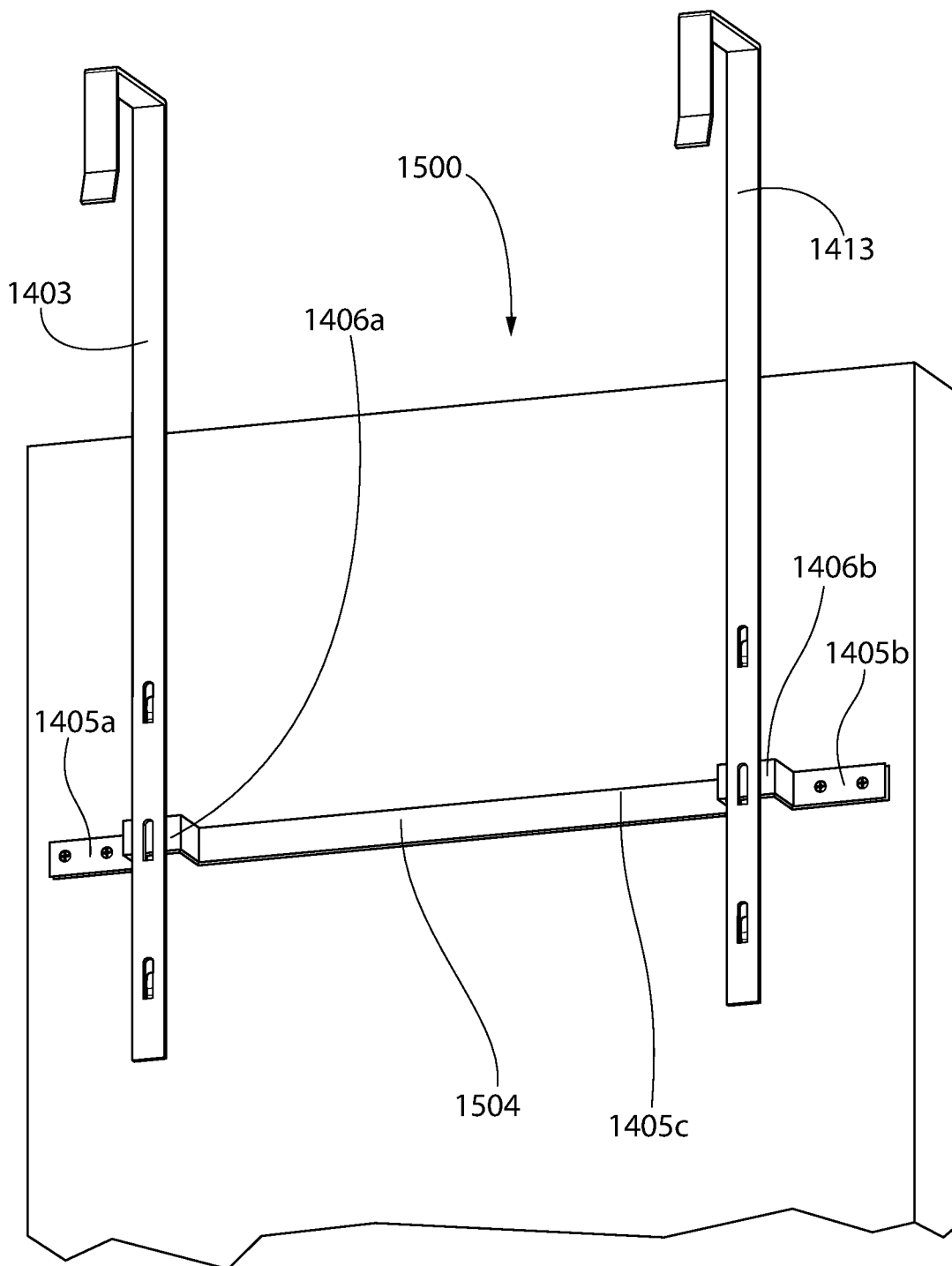


FIG. 25C

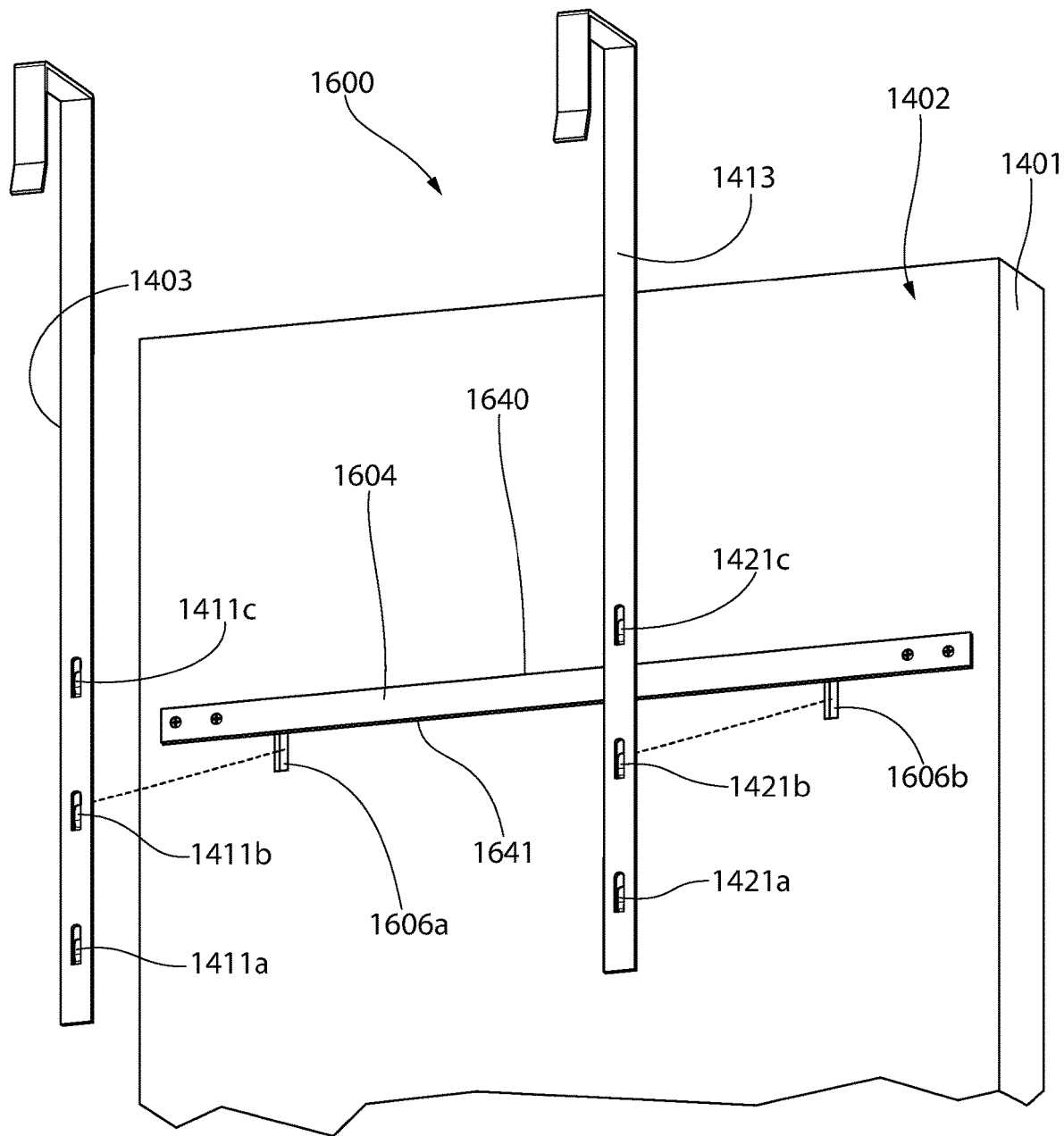


FIG. 25D

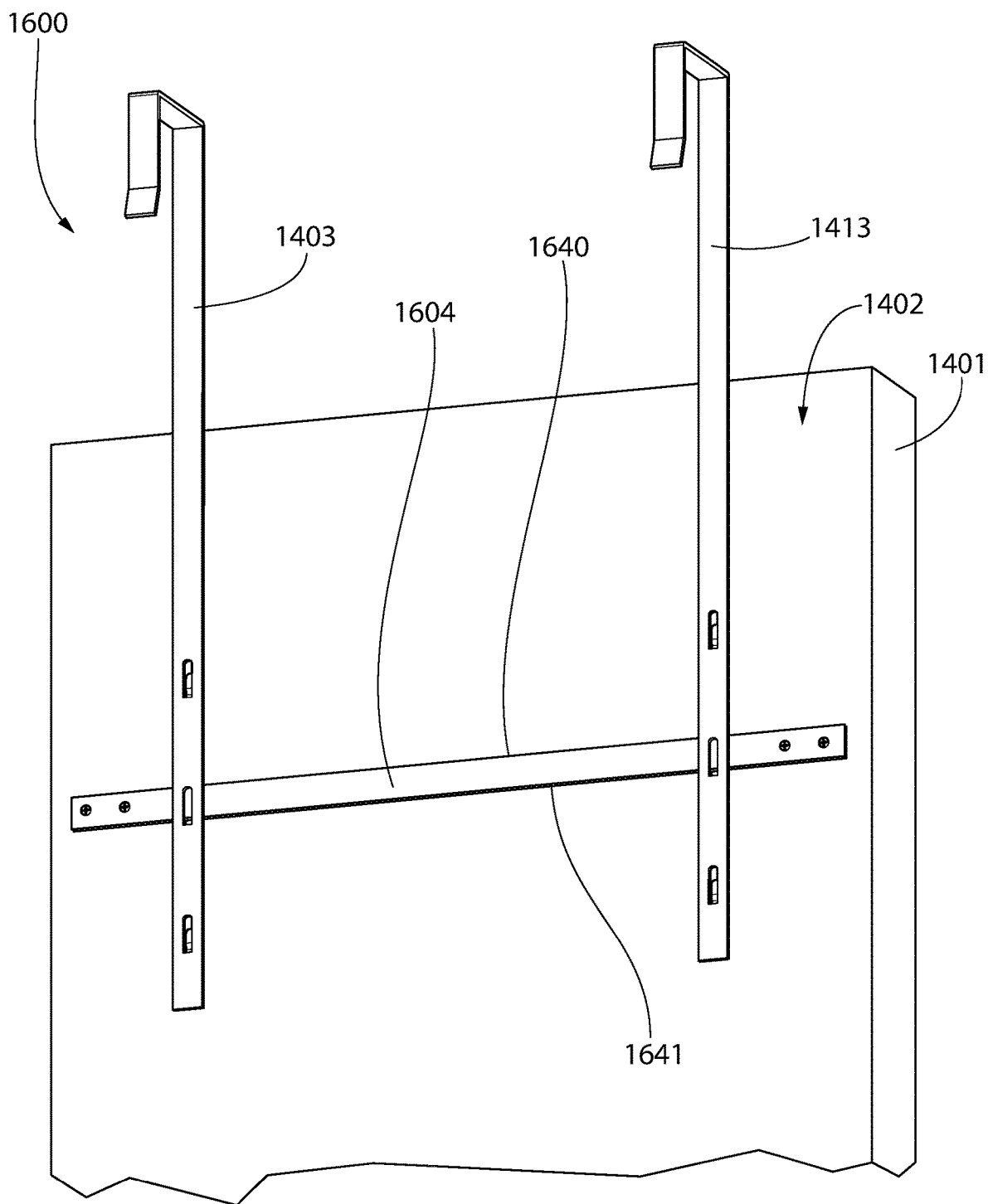


FIG. 25E

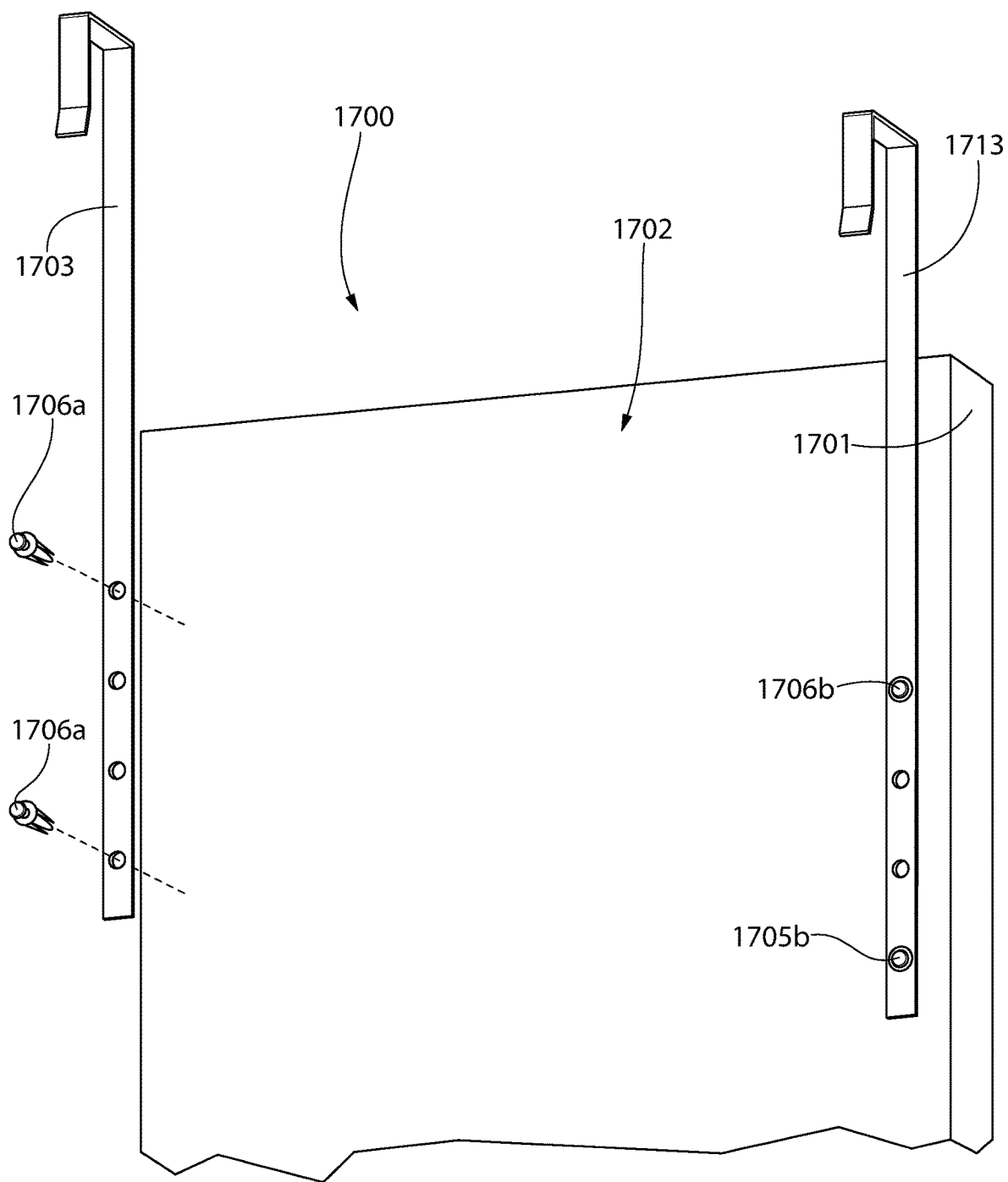


FIG. 26

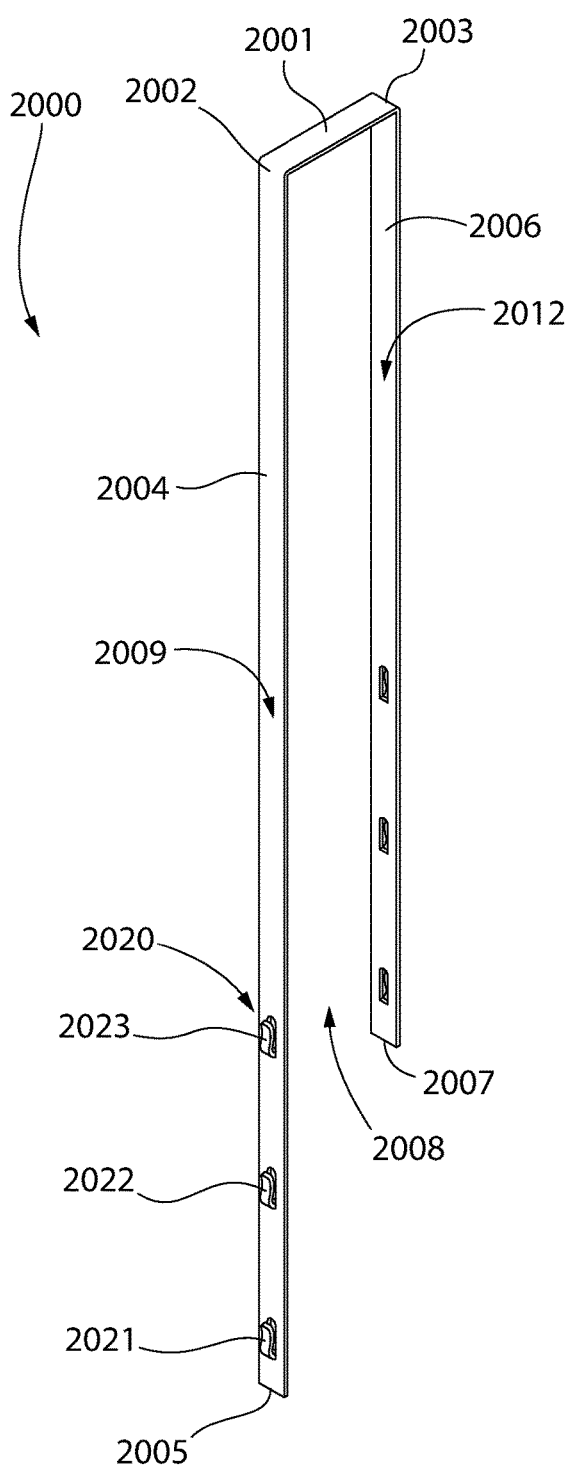


FIG. 27

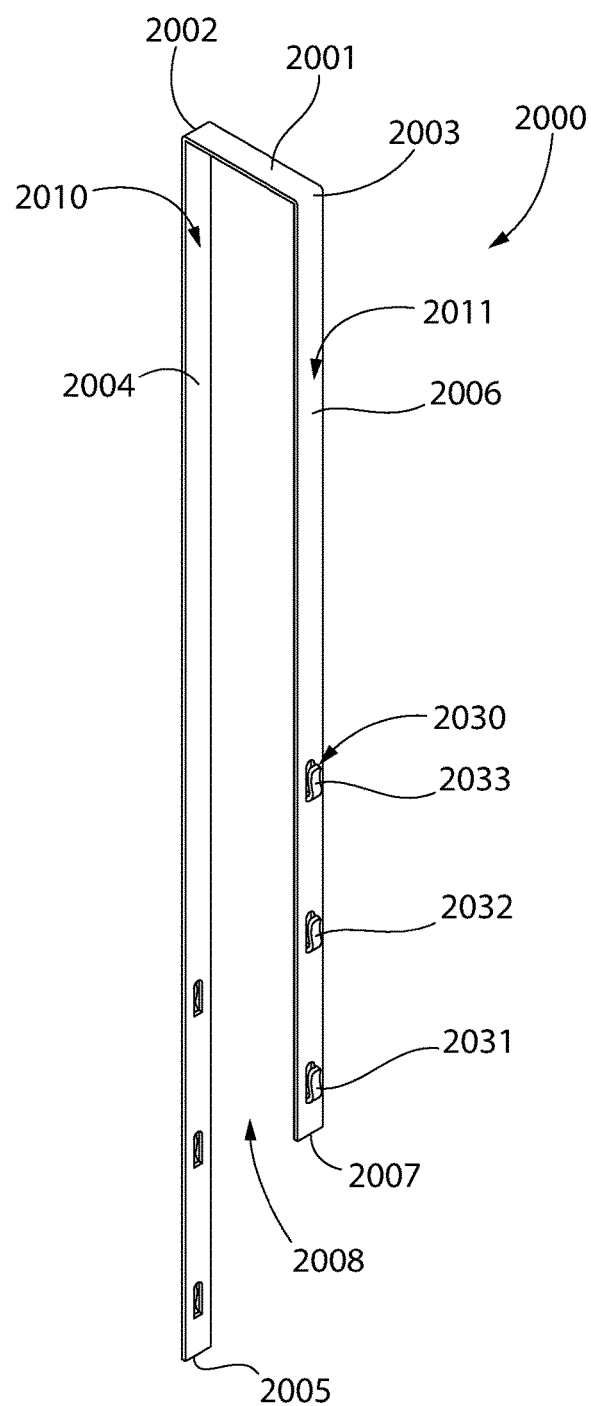


FIG. 28



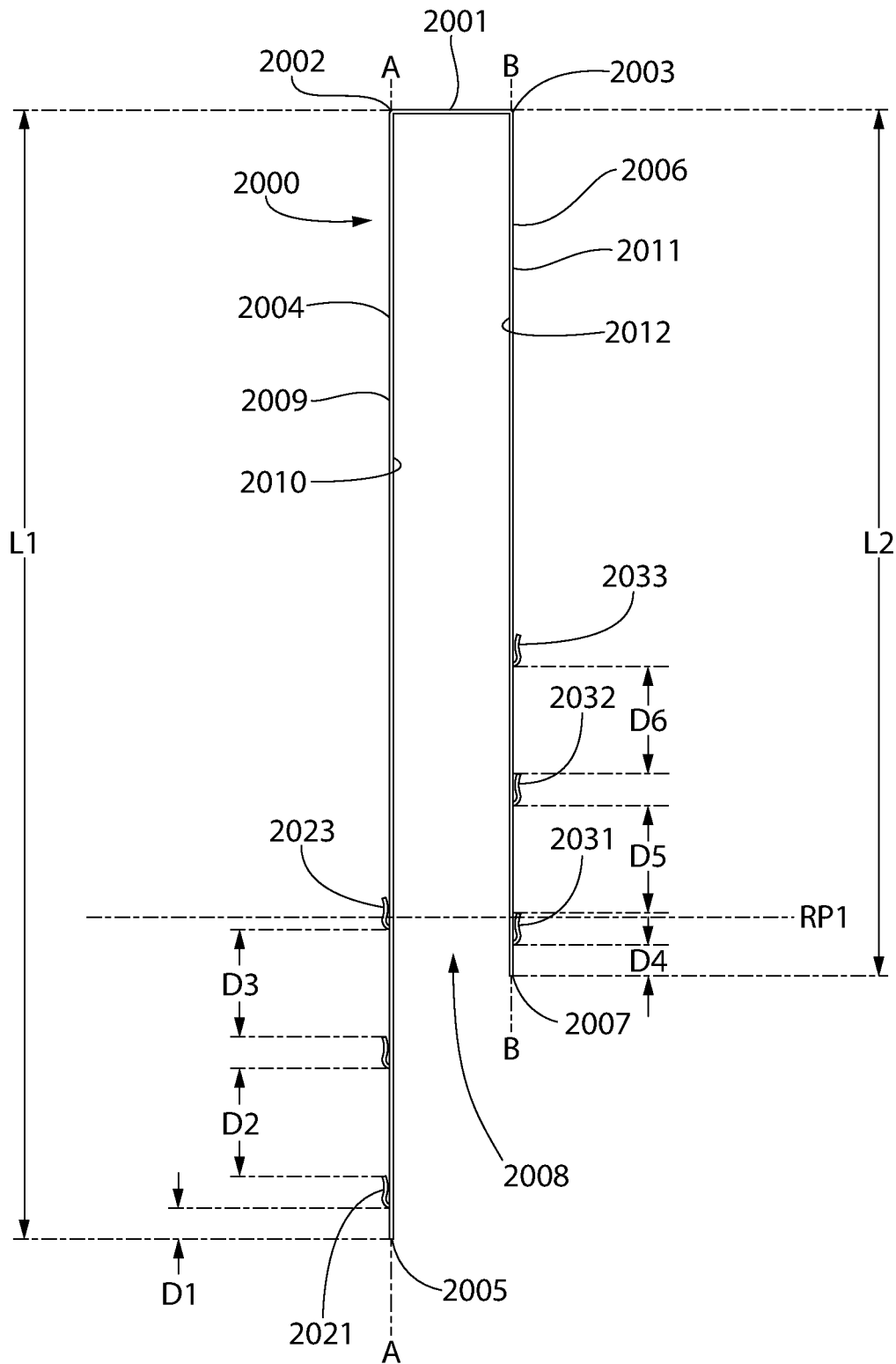


FIG. 29

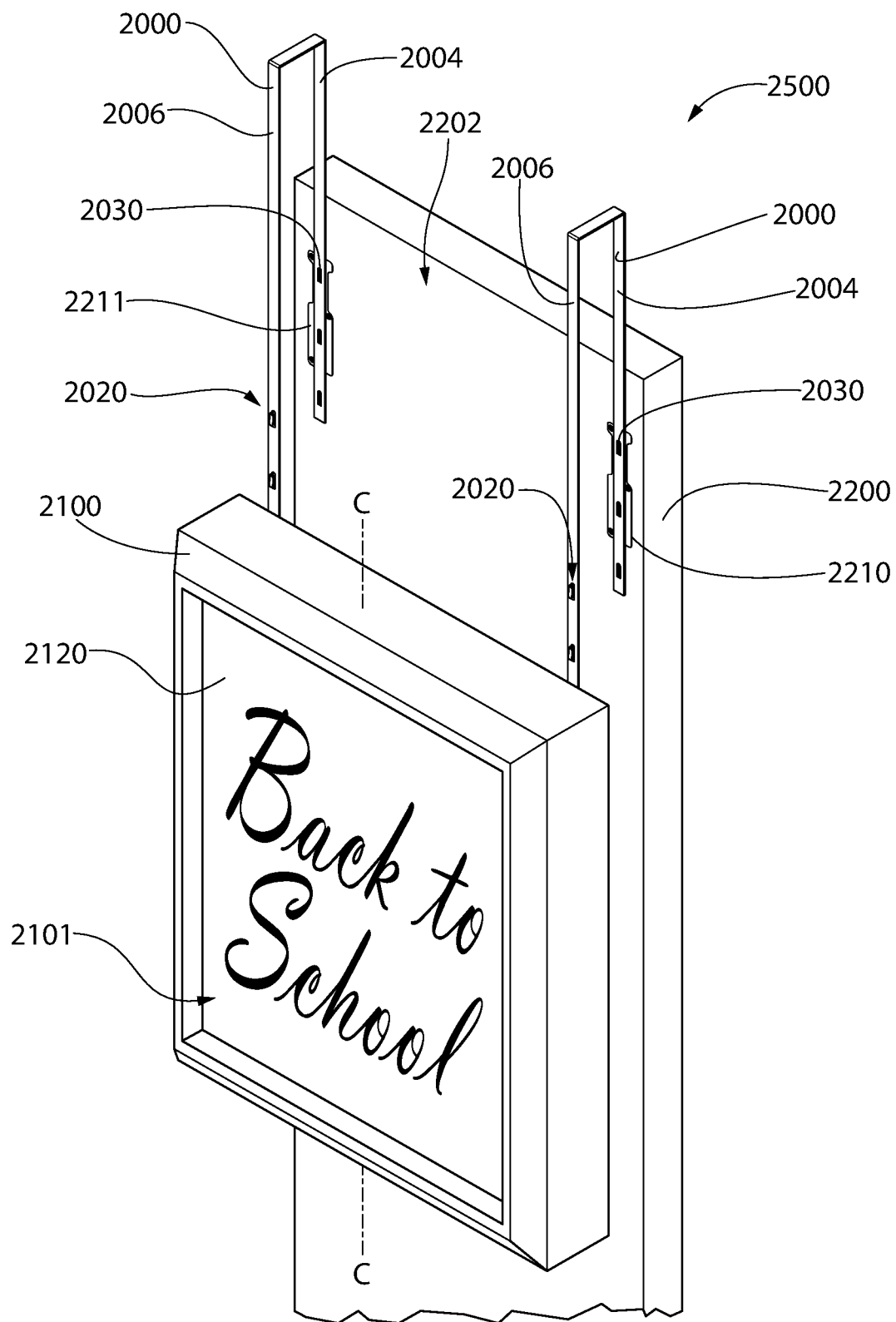


FIG. 30A

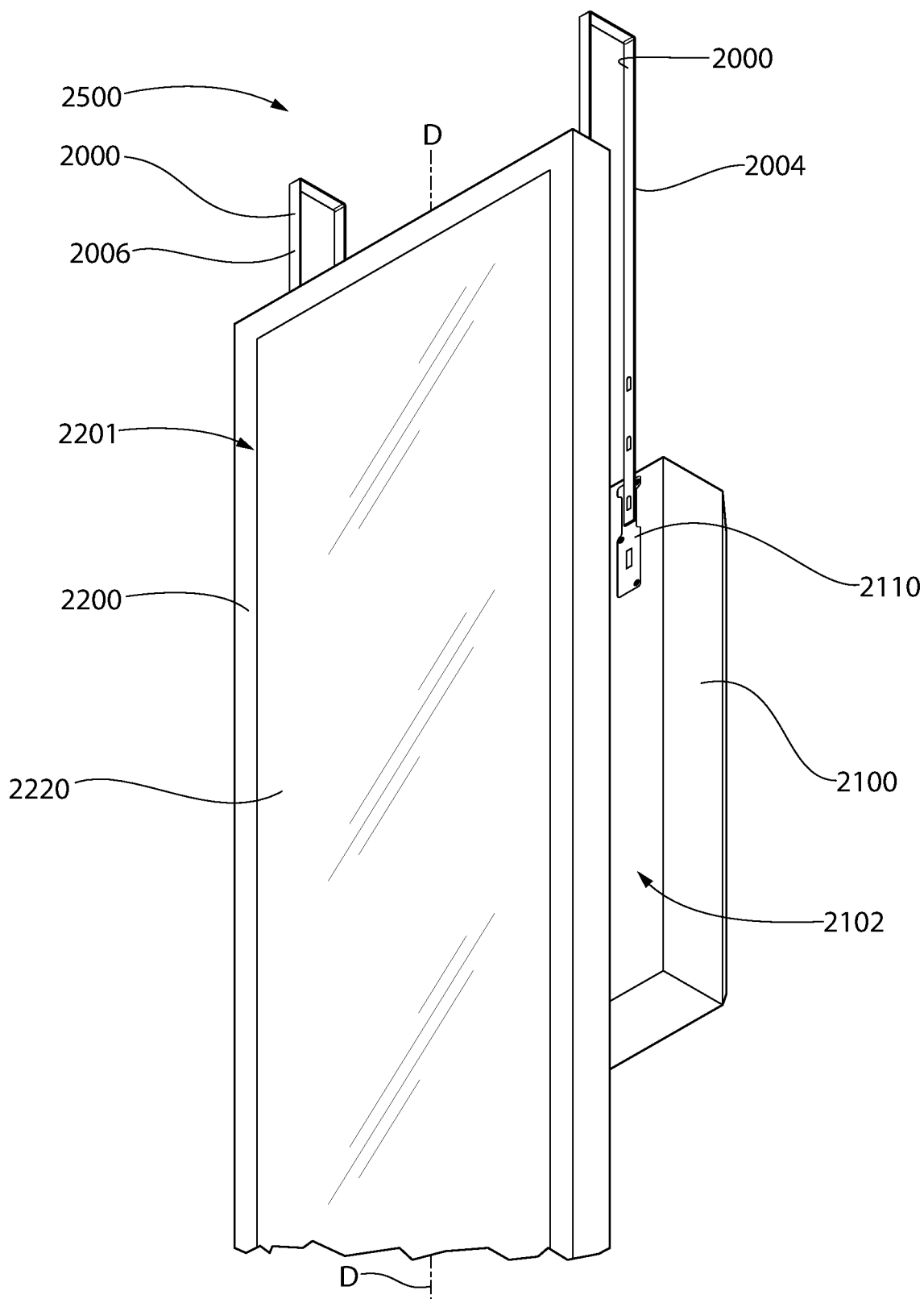


FIG. 30B

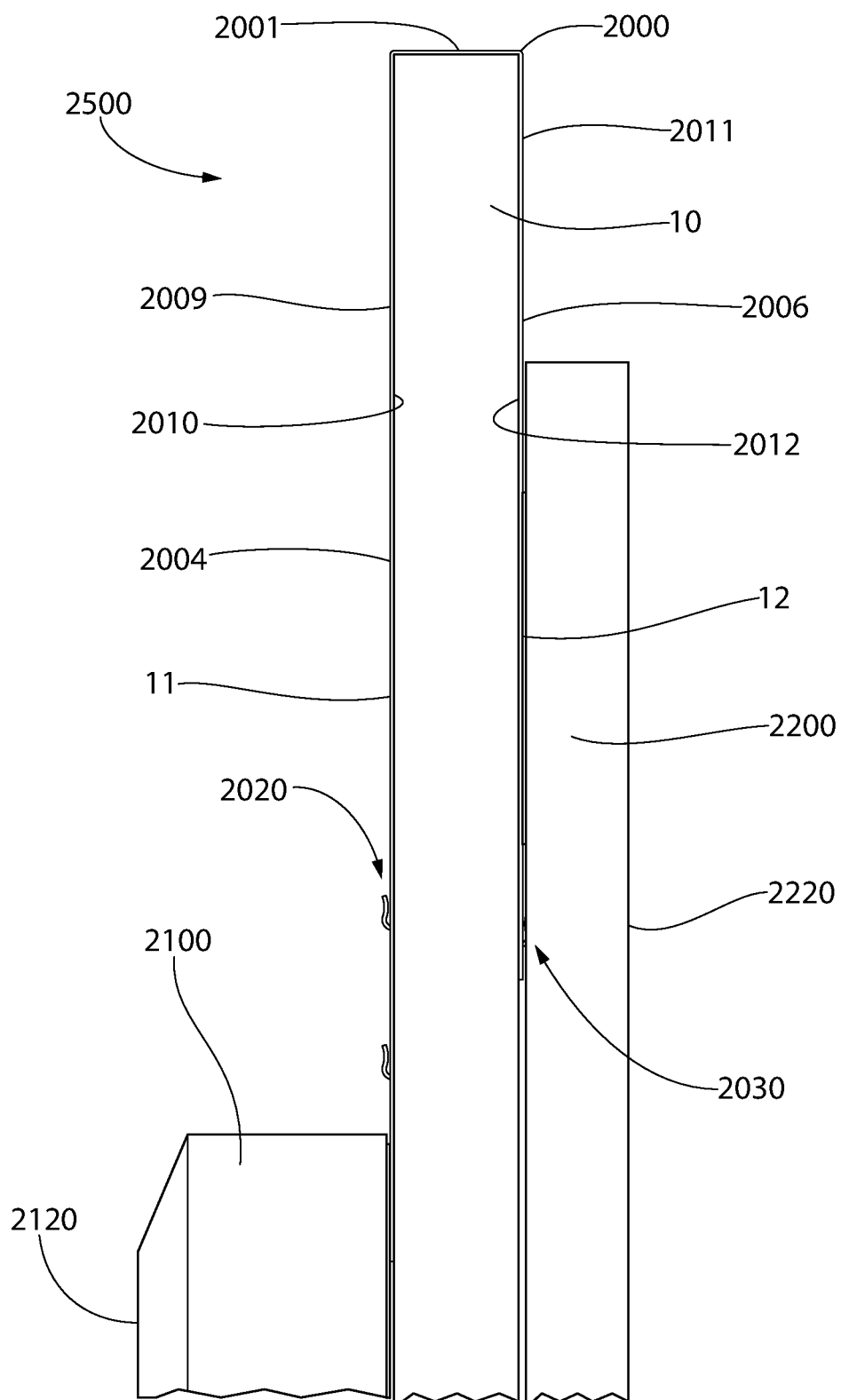


FIG. 31

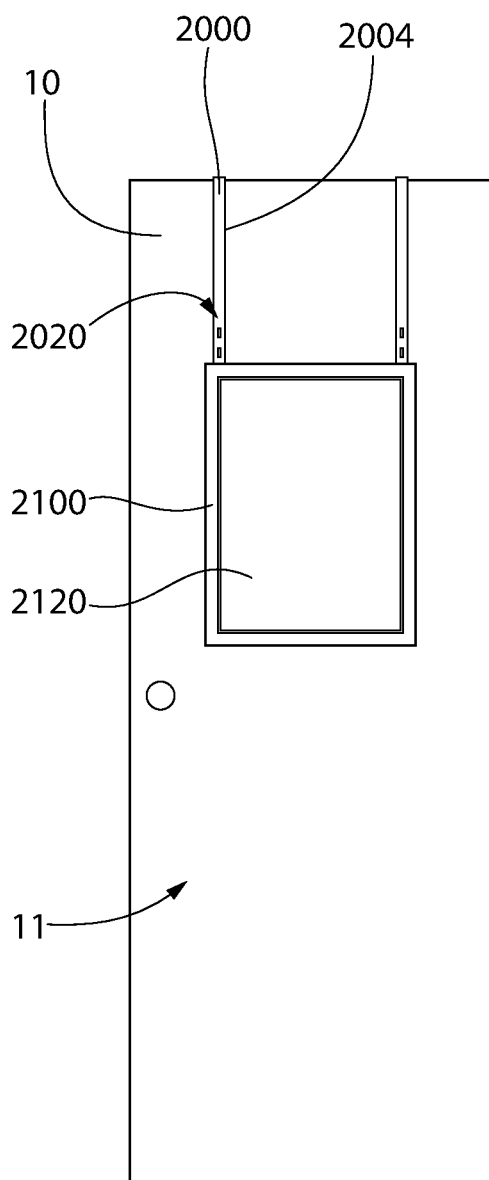


FIG. 32A

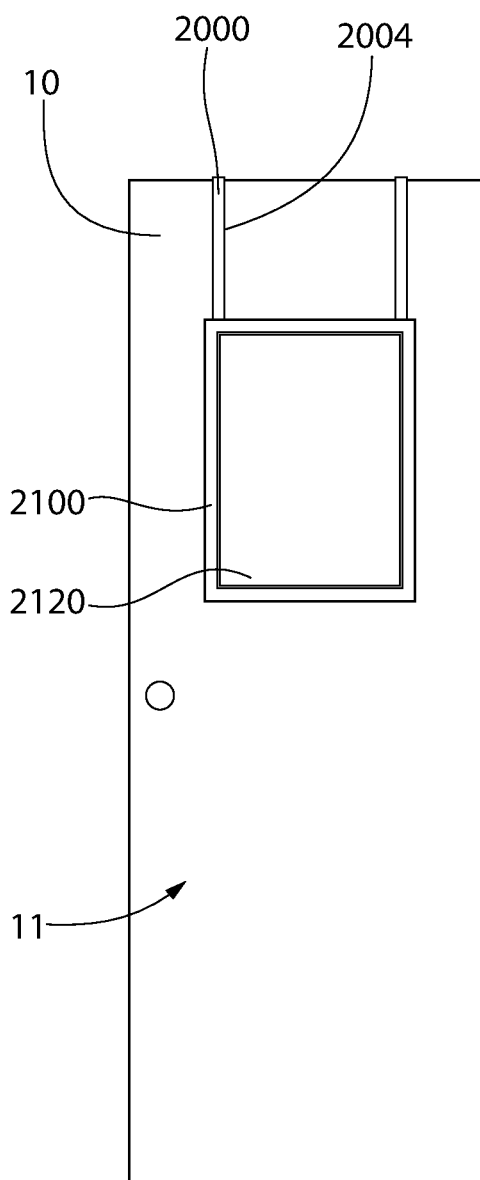


FIG. 32B

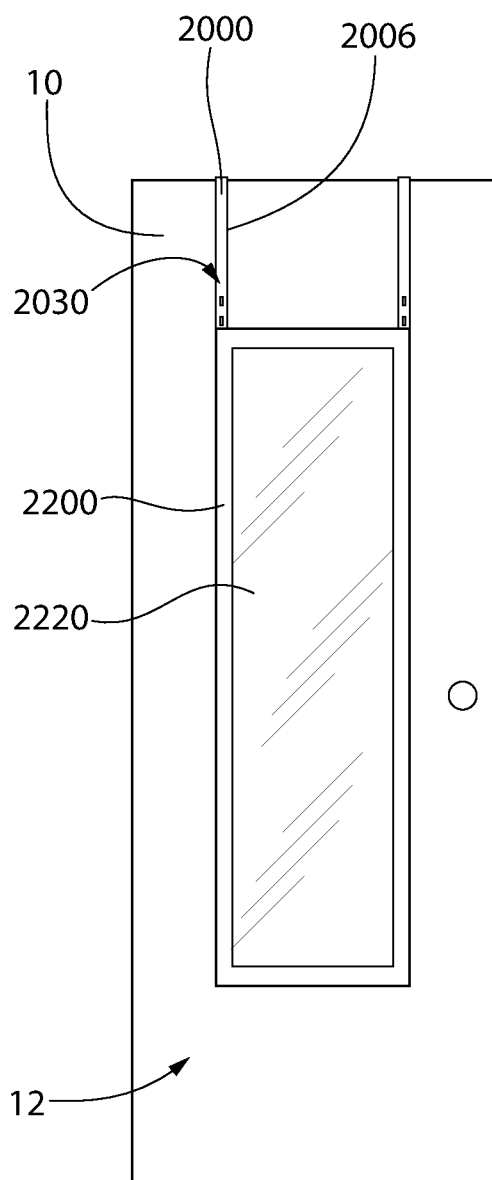


FIG. 32C

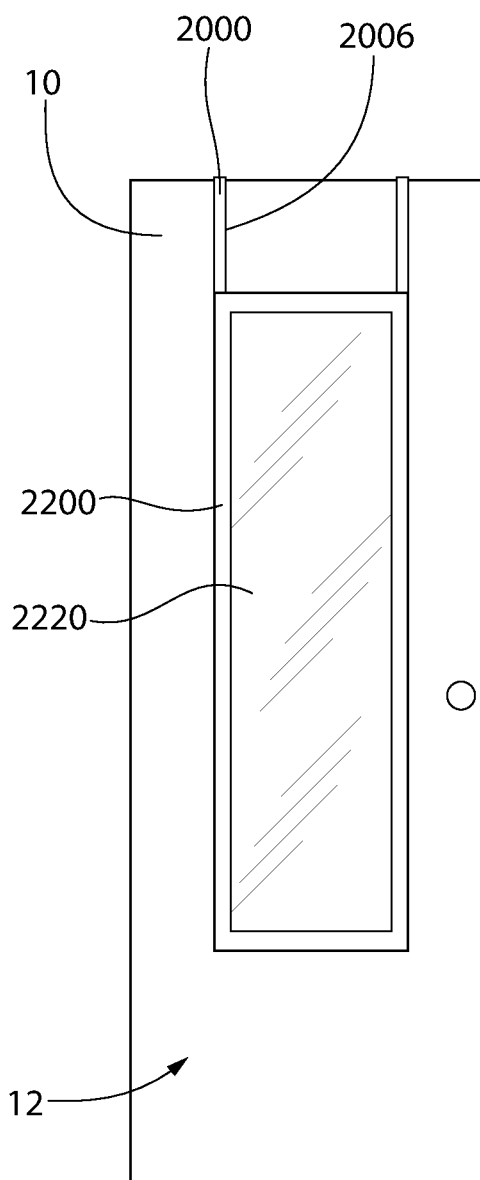


FIG. 32D

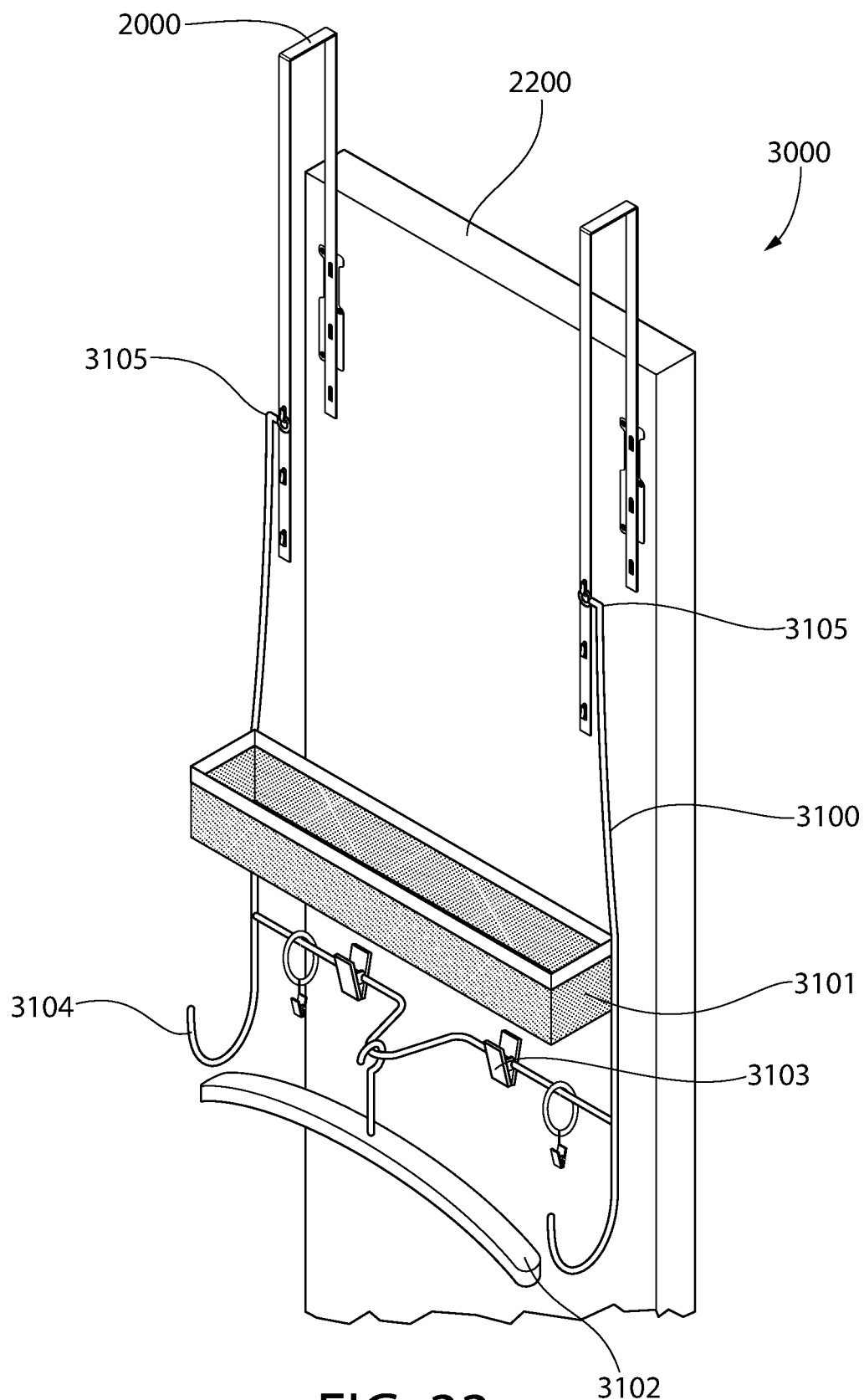


FIG. 33

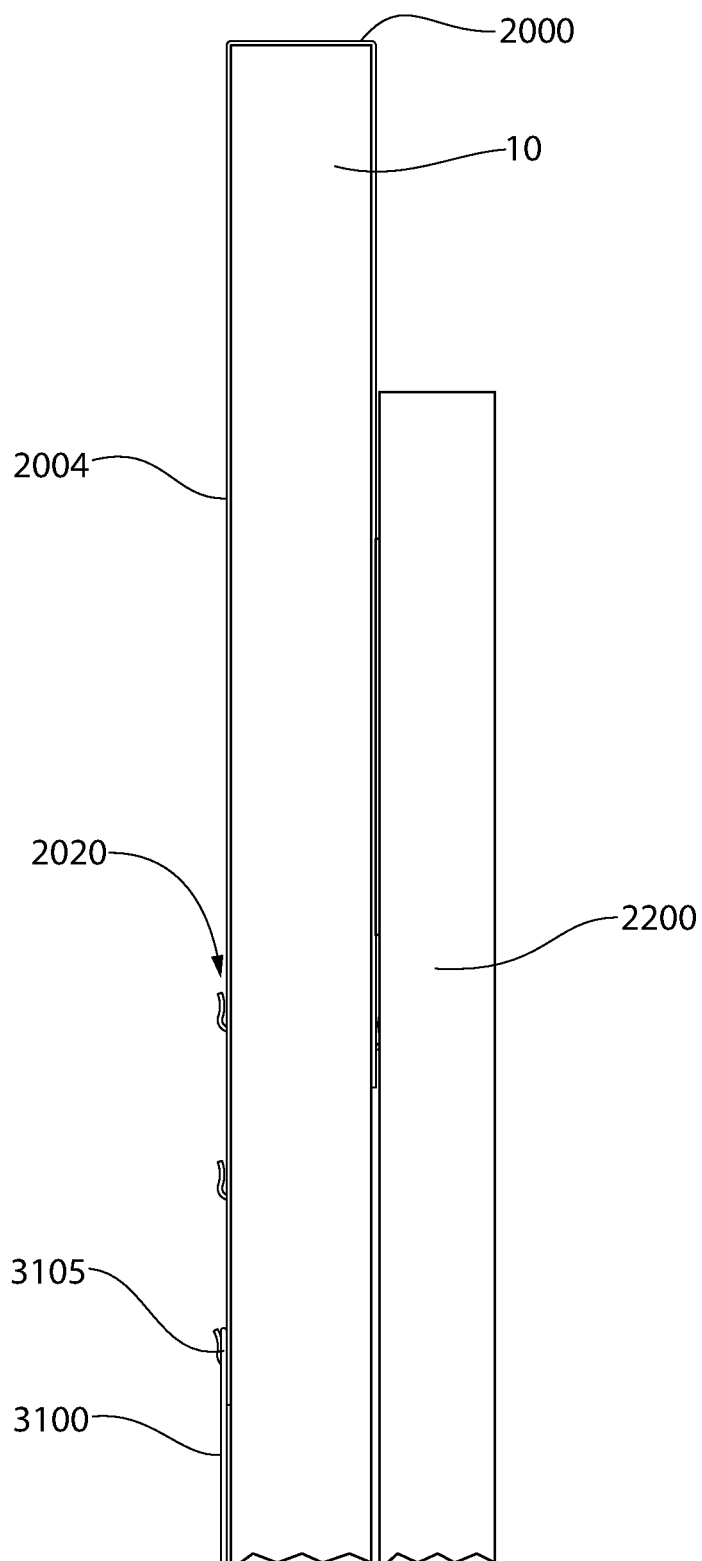


FIG. 34



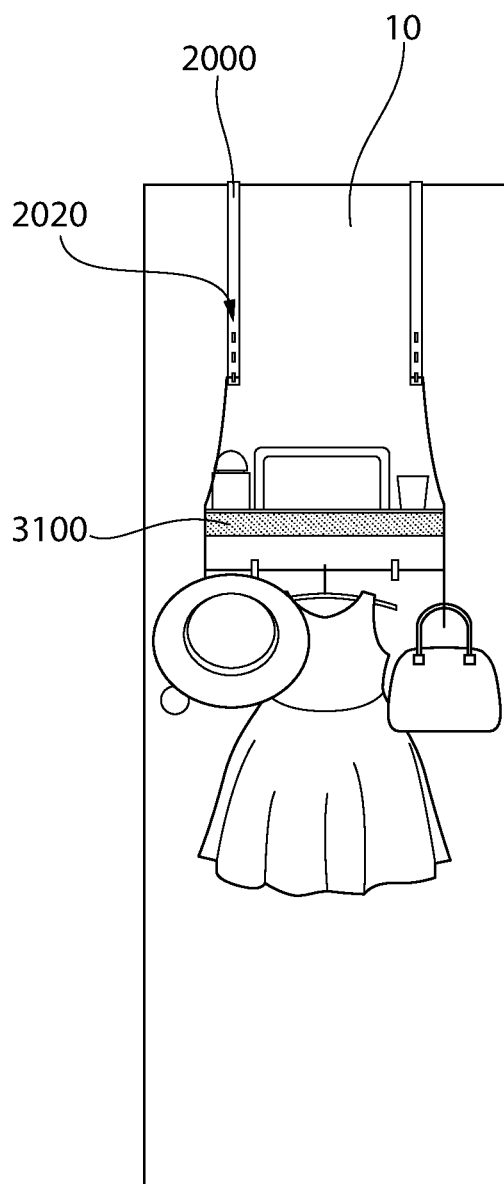


FIG. 35A

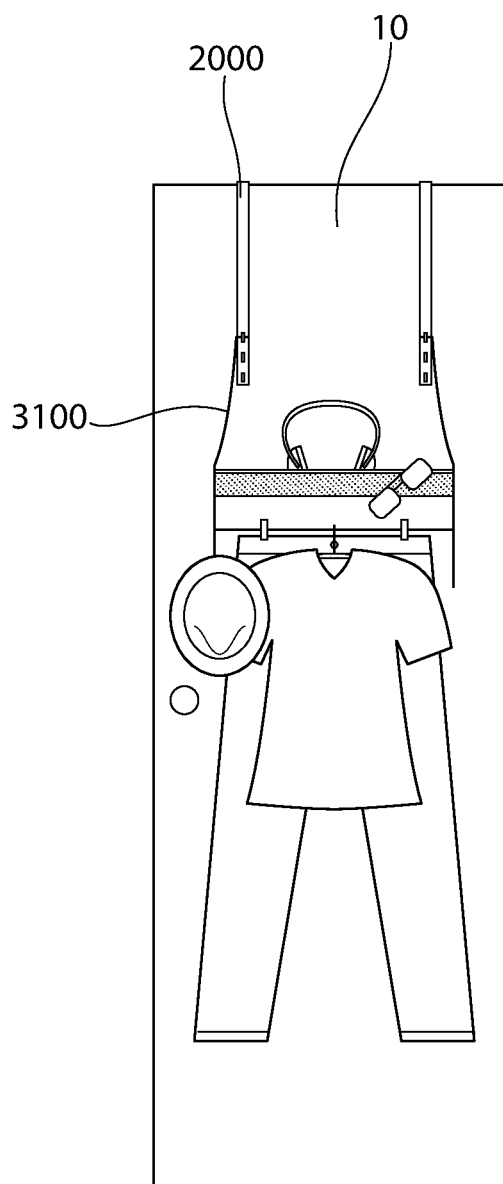


FIG. 35B

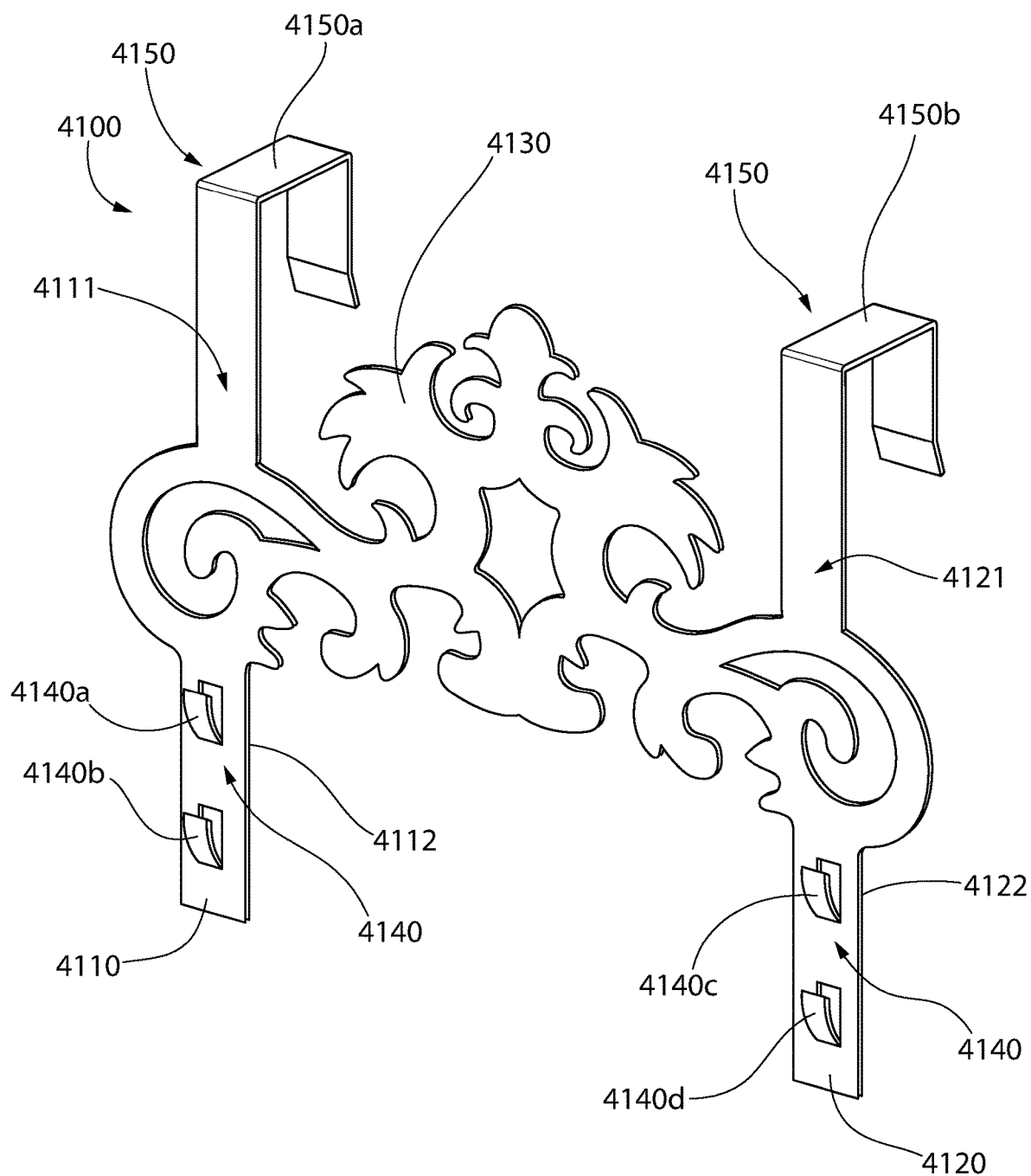


FIG. 36A

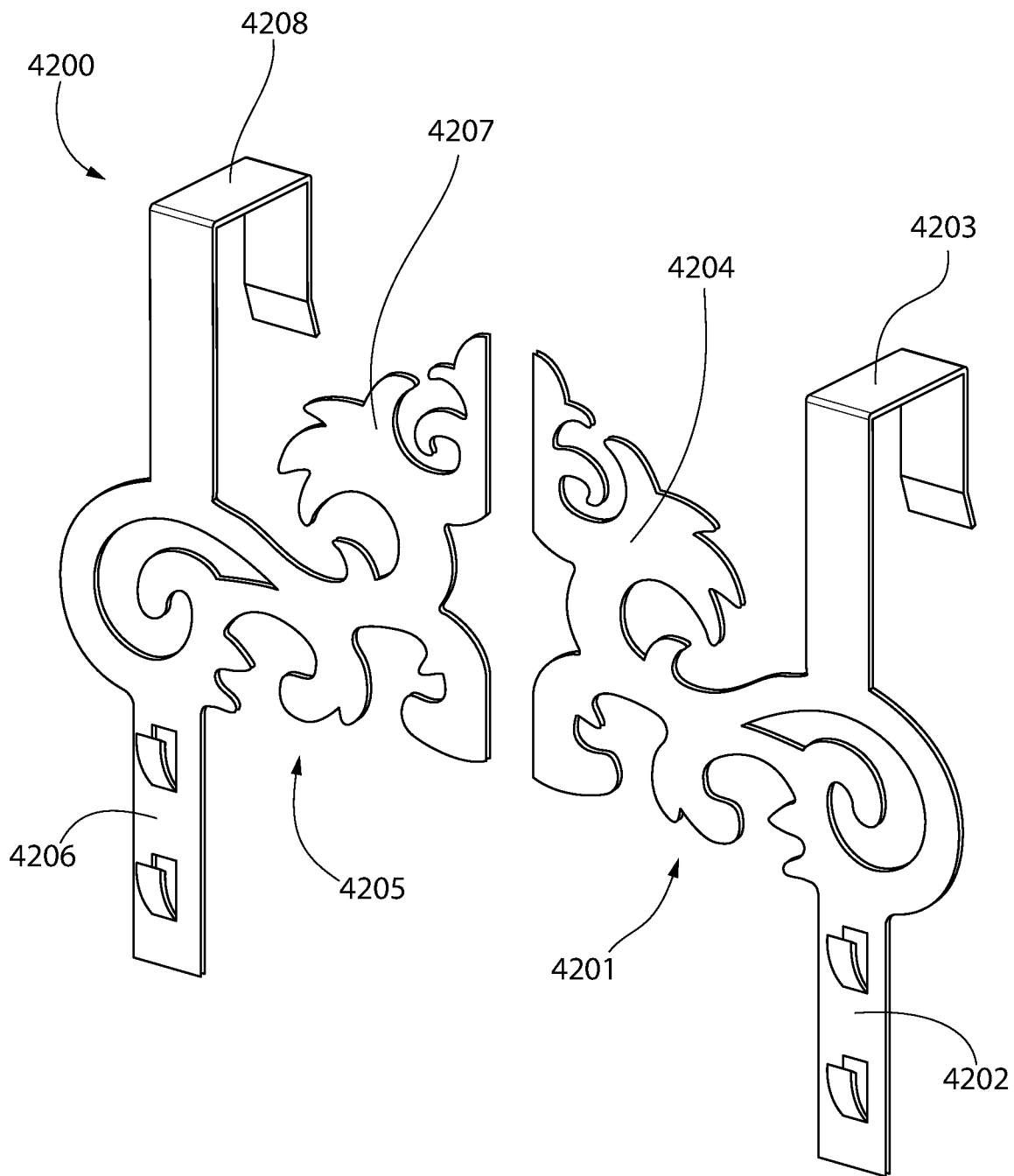


FIG. 36B

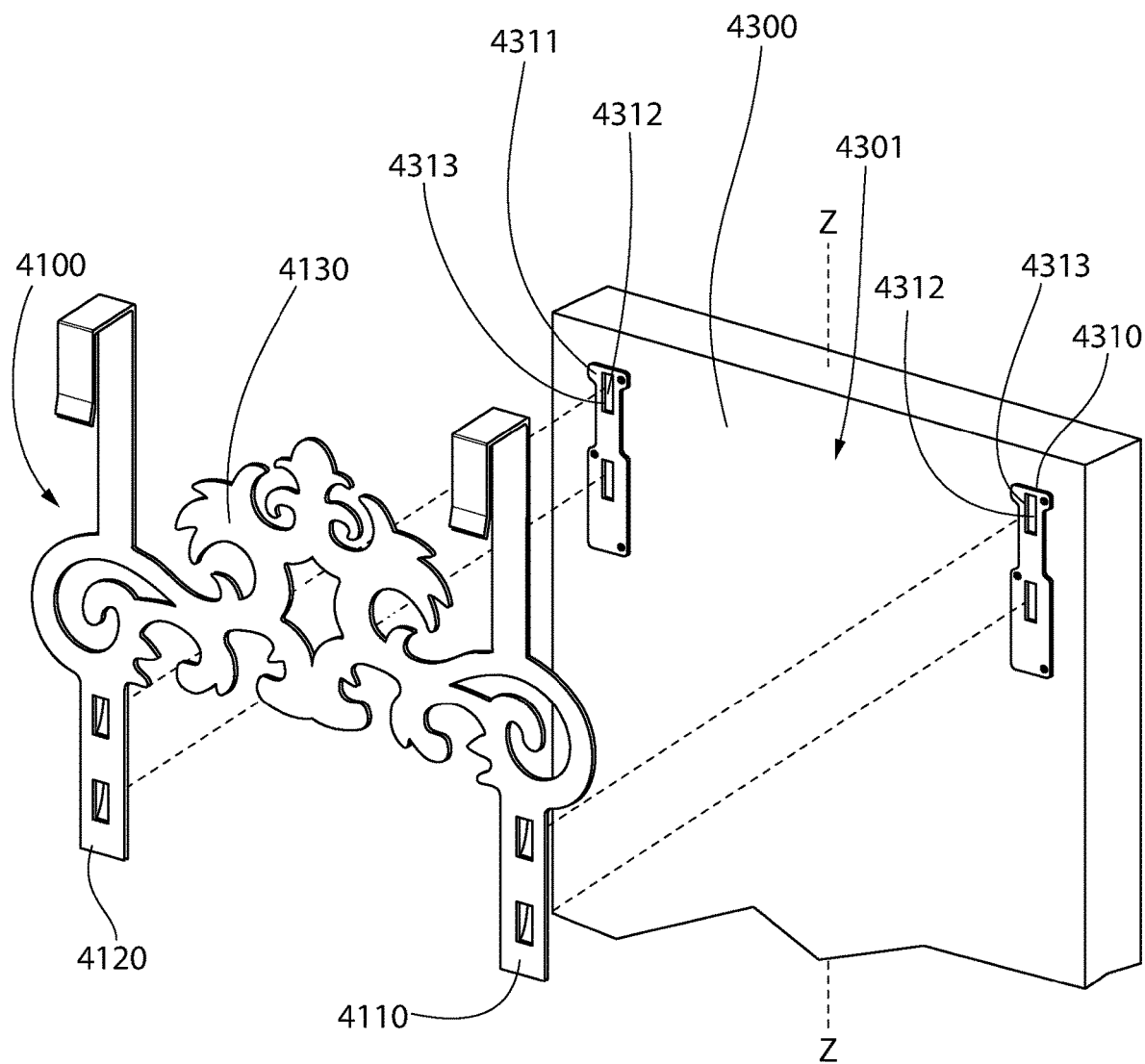


FIG. 37A

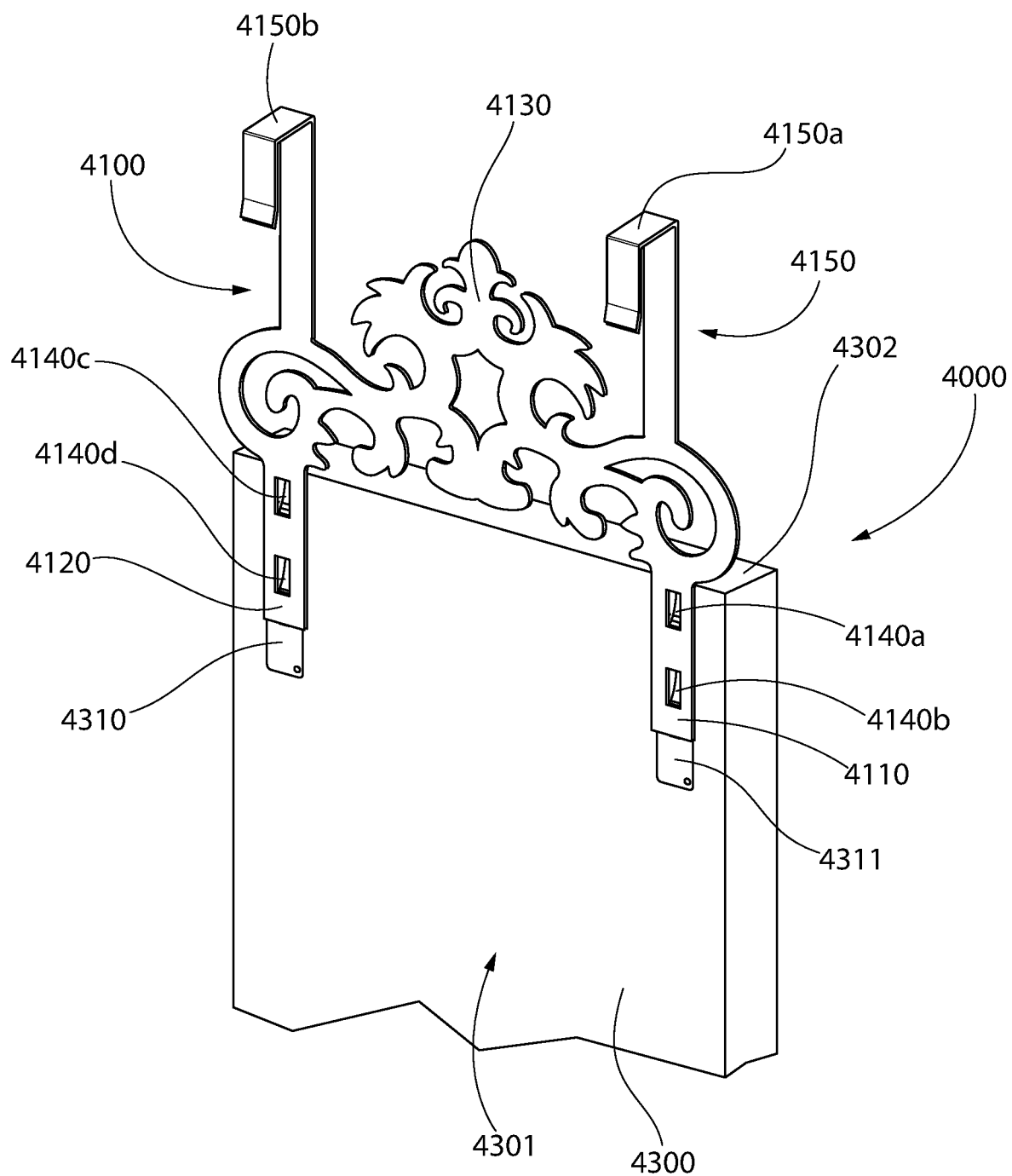


FIG. 37B

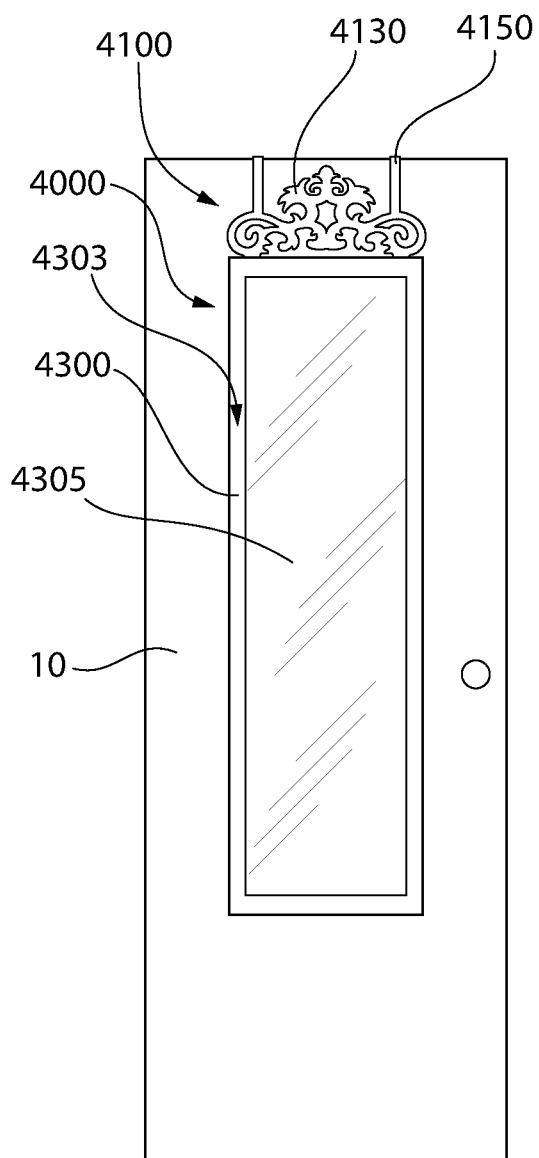


FIG. 37C

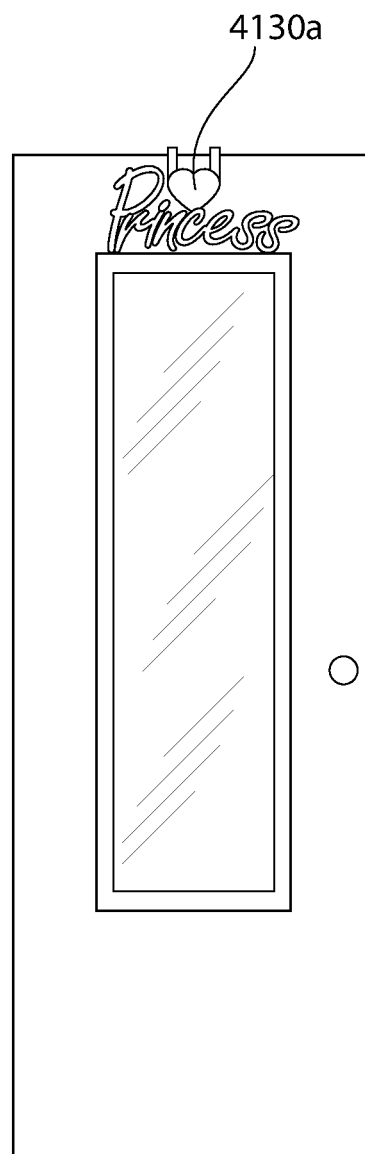


FIG. 38A

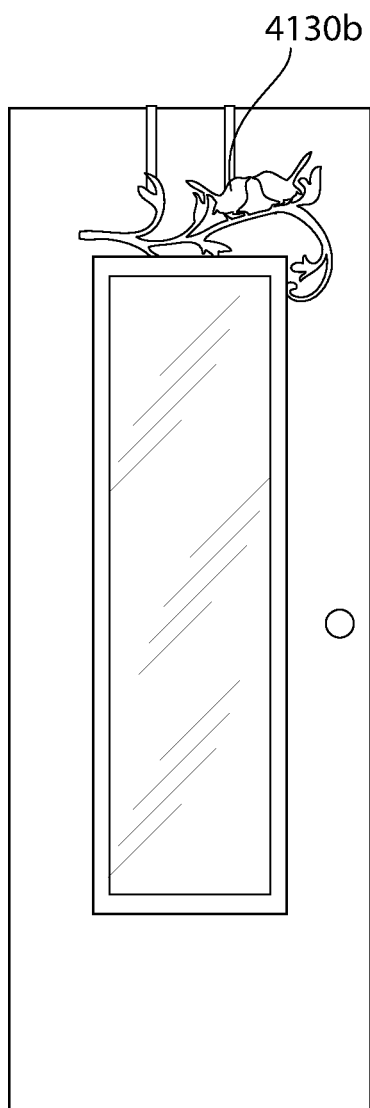


FIG. 38B

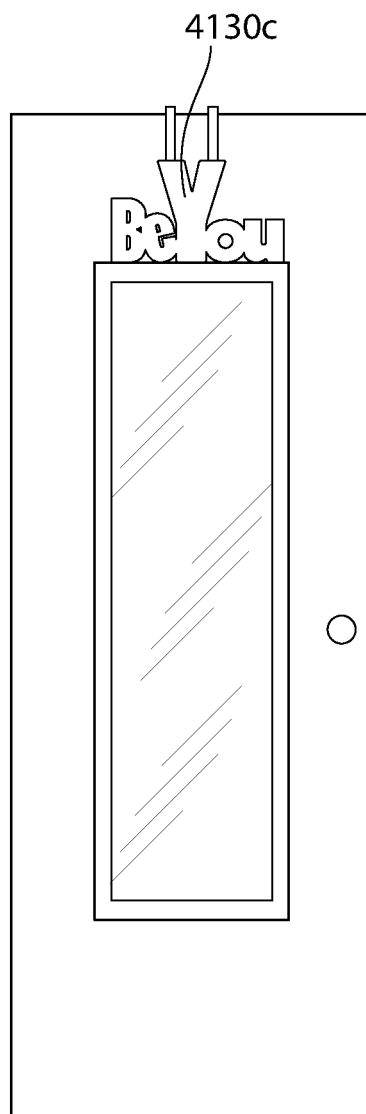


FIG. 38C

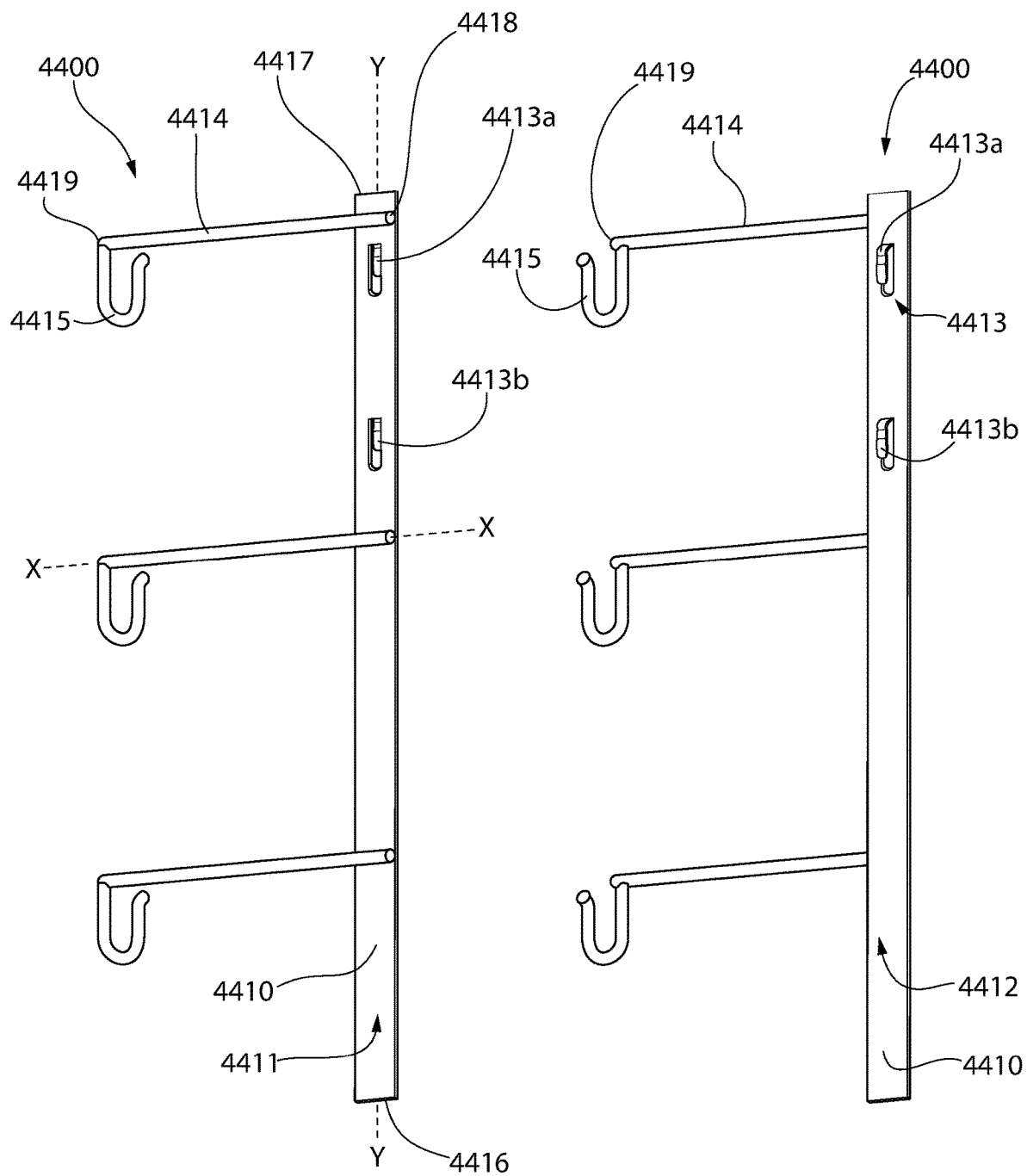


FIG. 39A

FIG. 39B



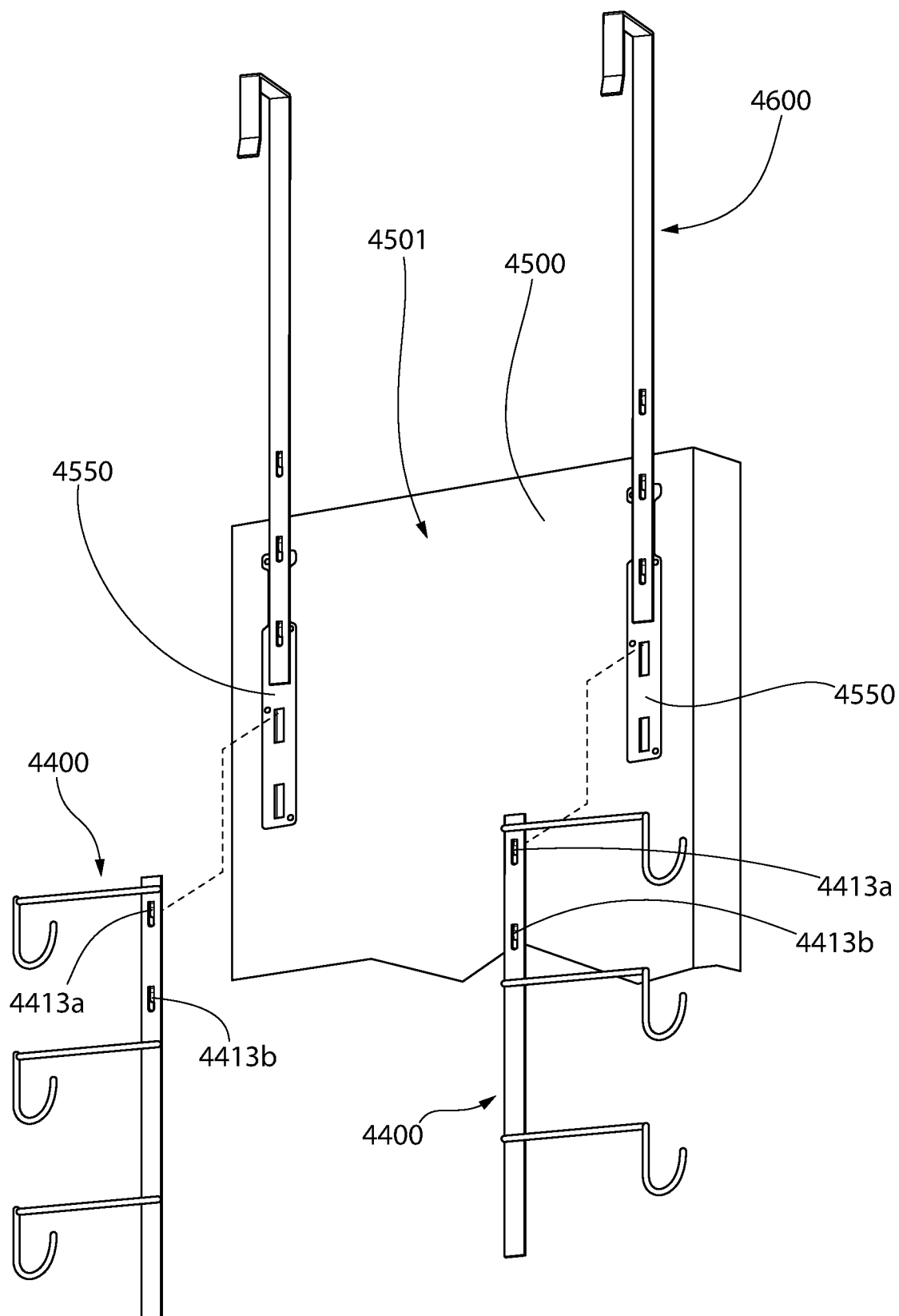


FIG. 40A

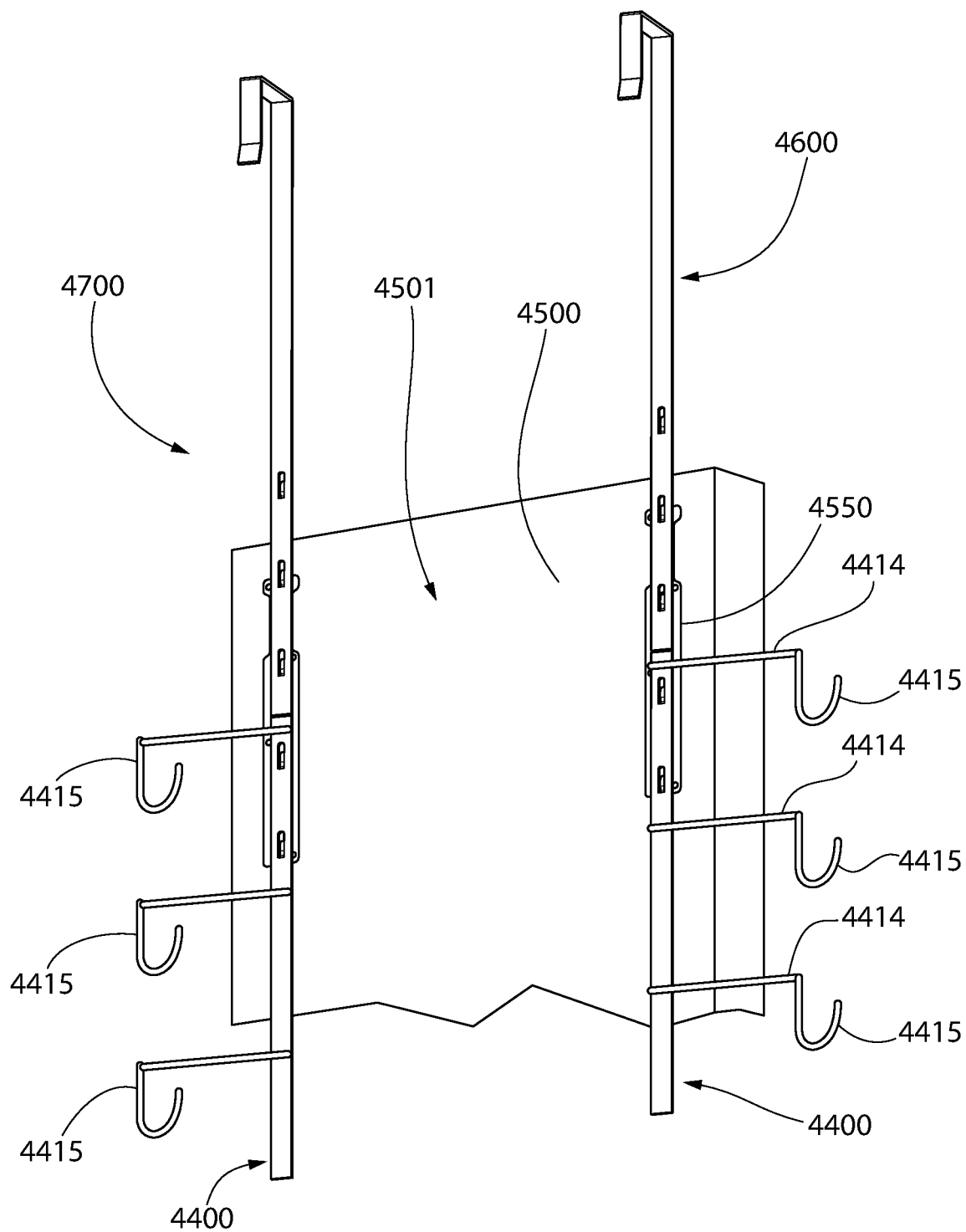


FIG. 40B

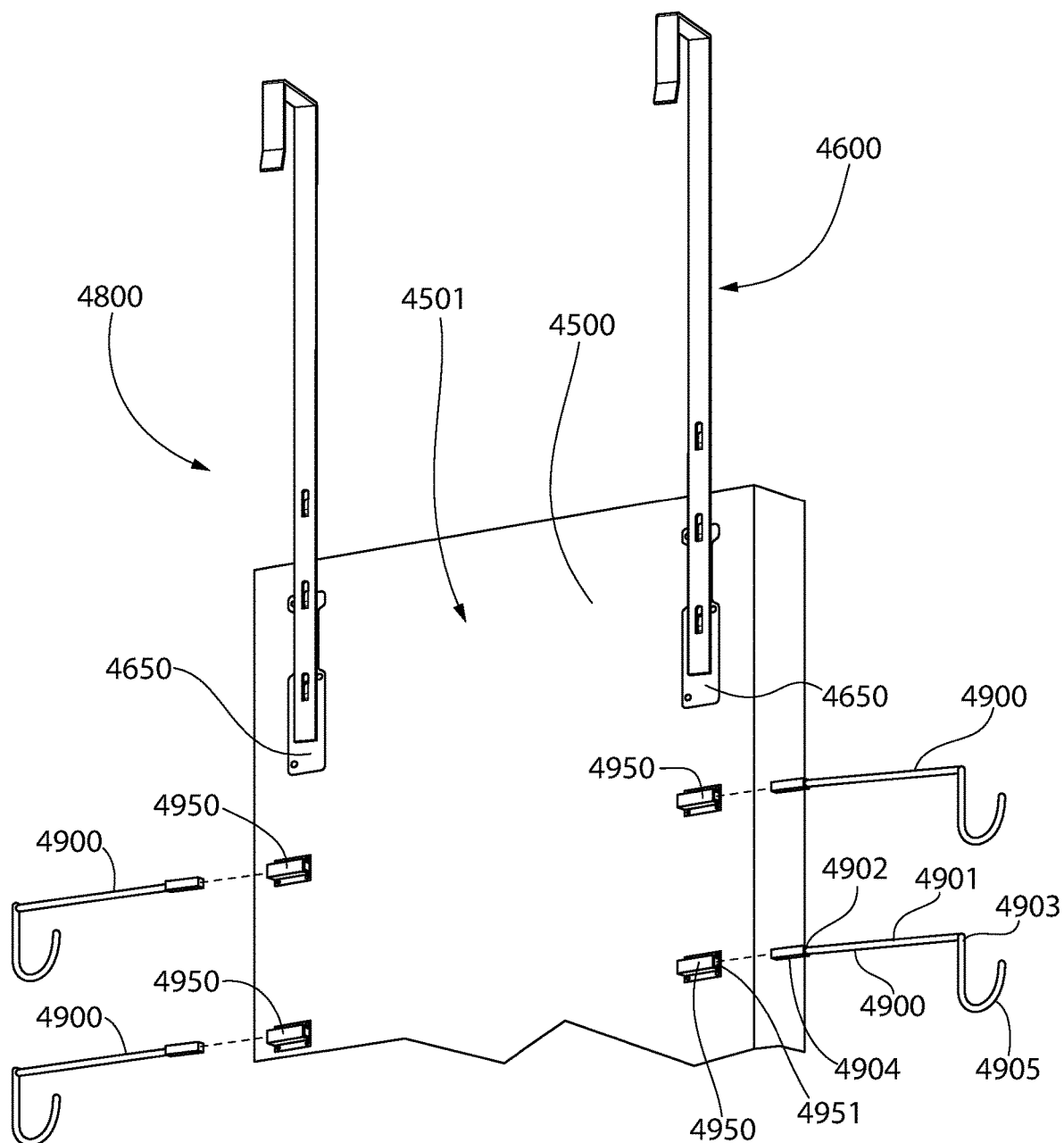


FIG. 41A

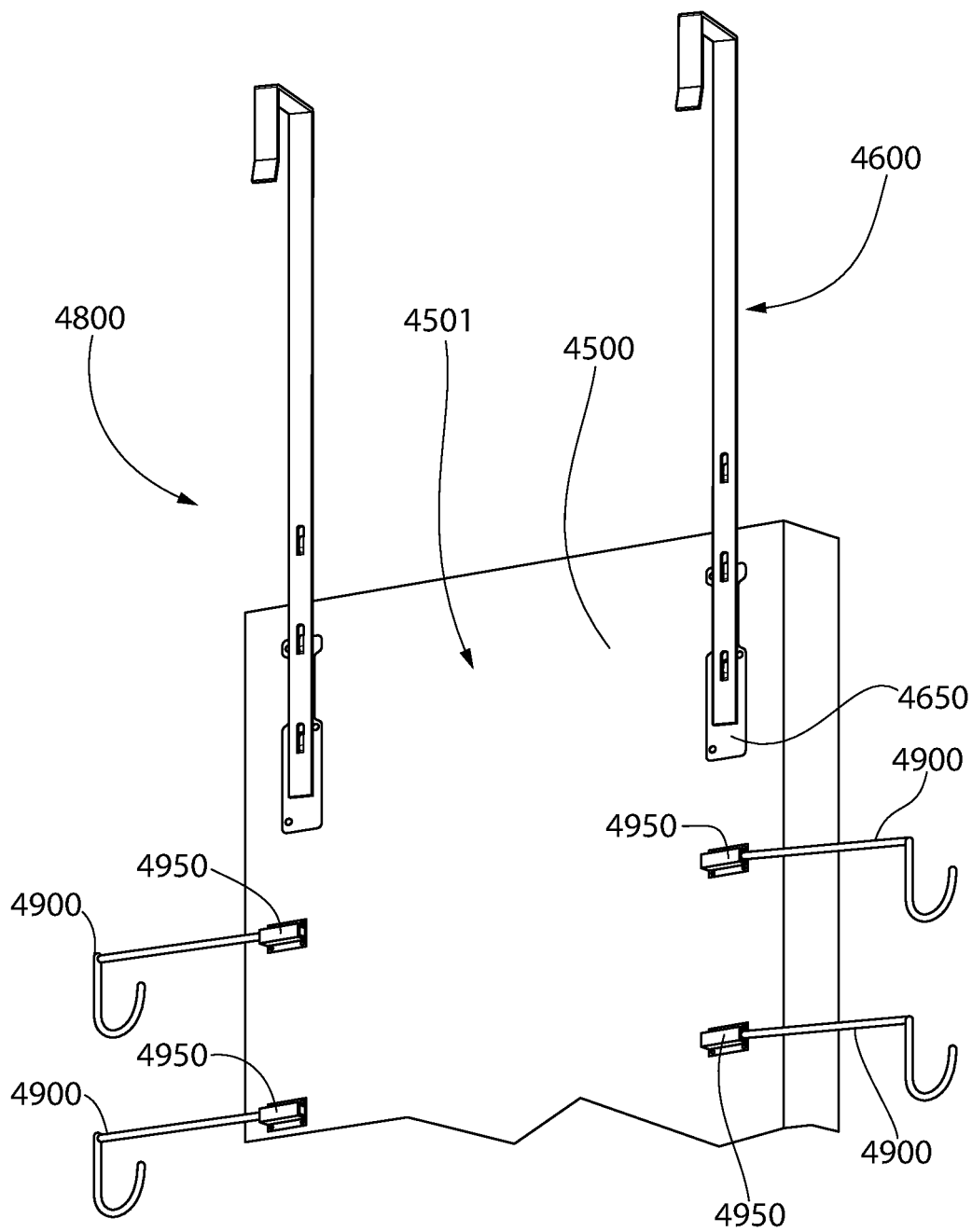


FIG. 41B

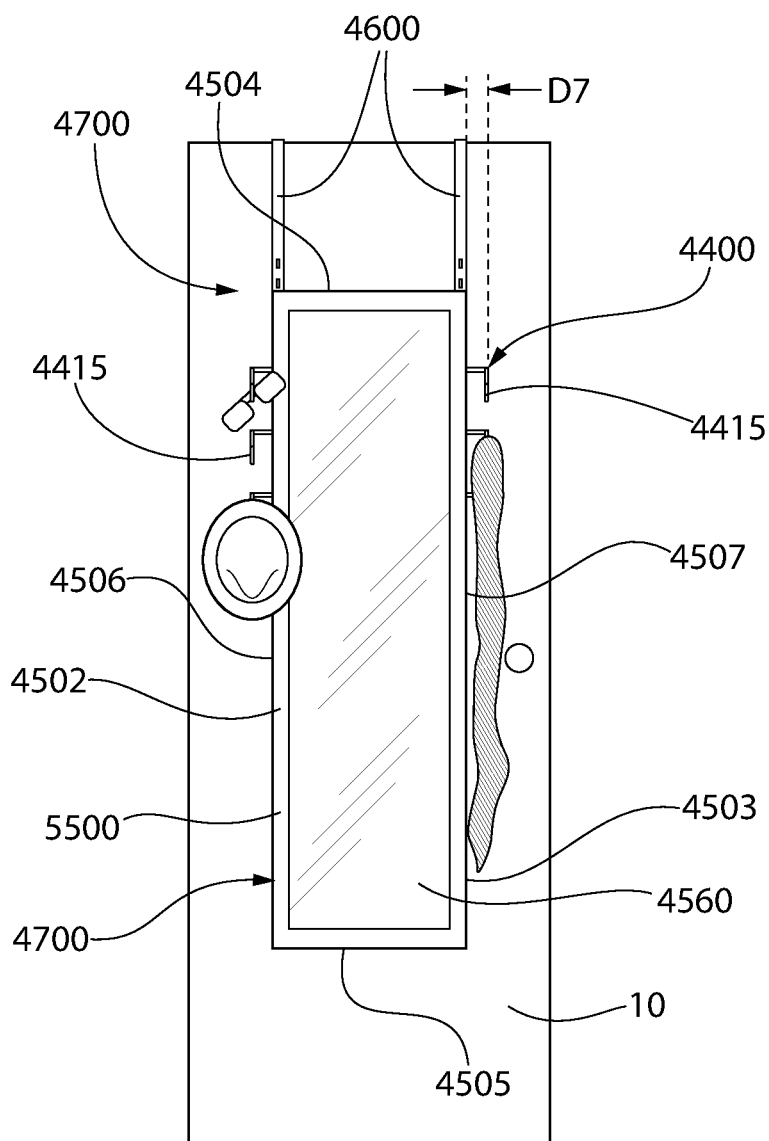


FIG. 42

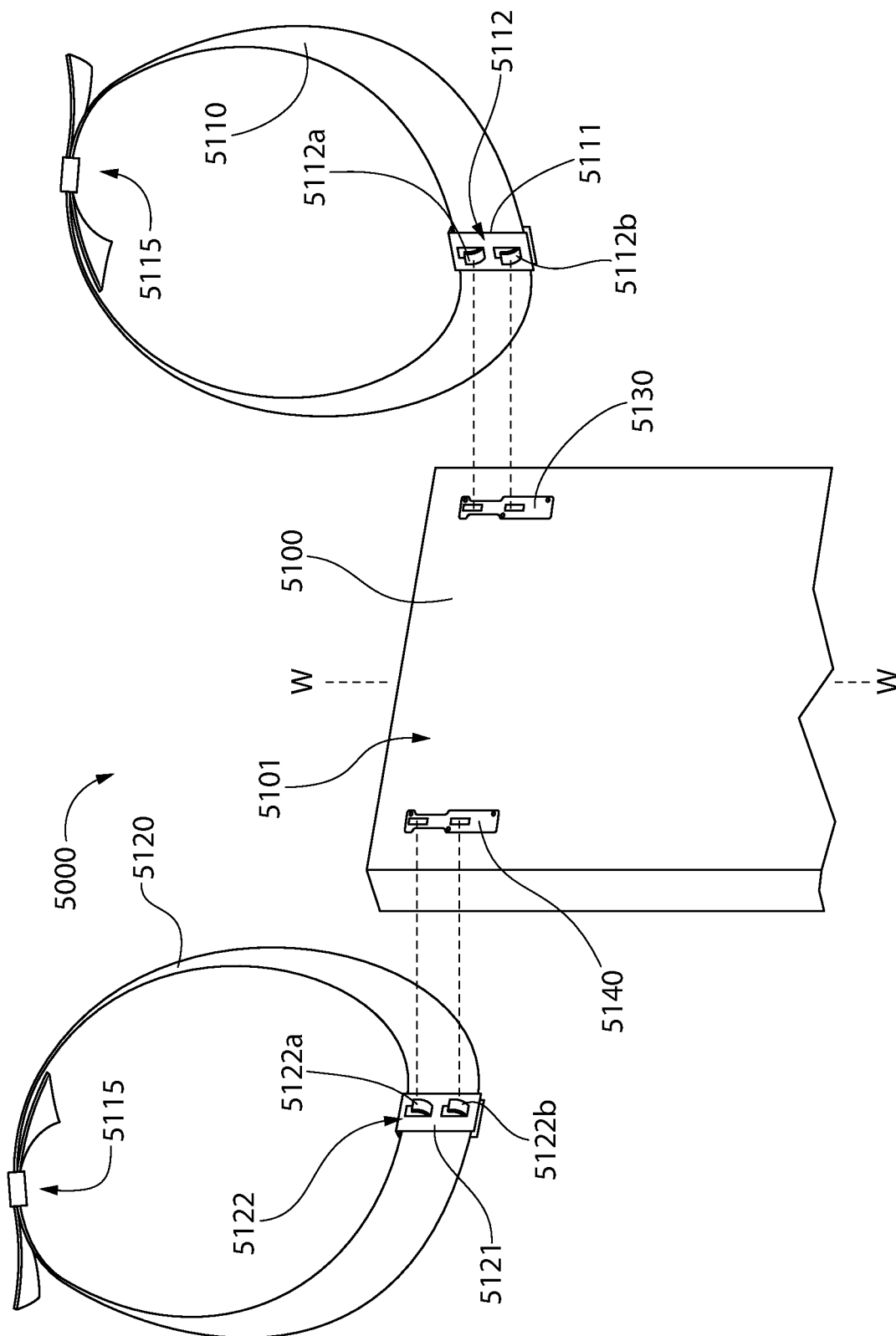


FIG. 43A

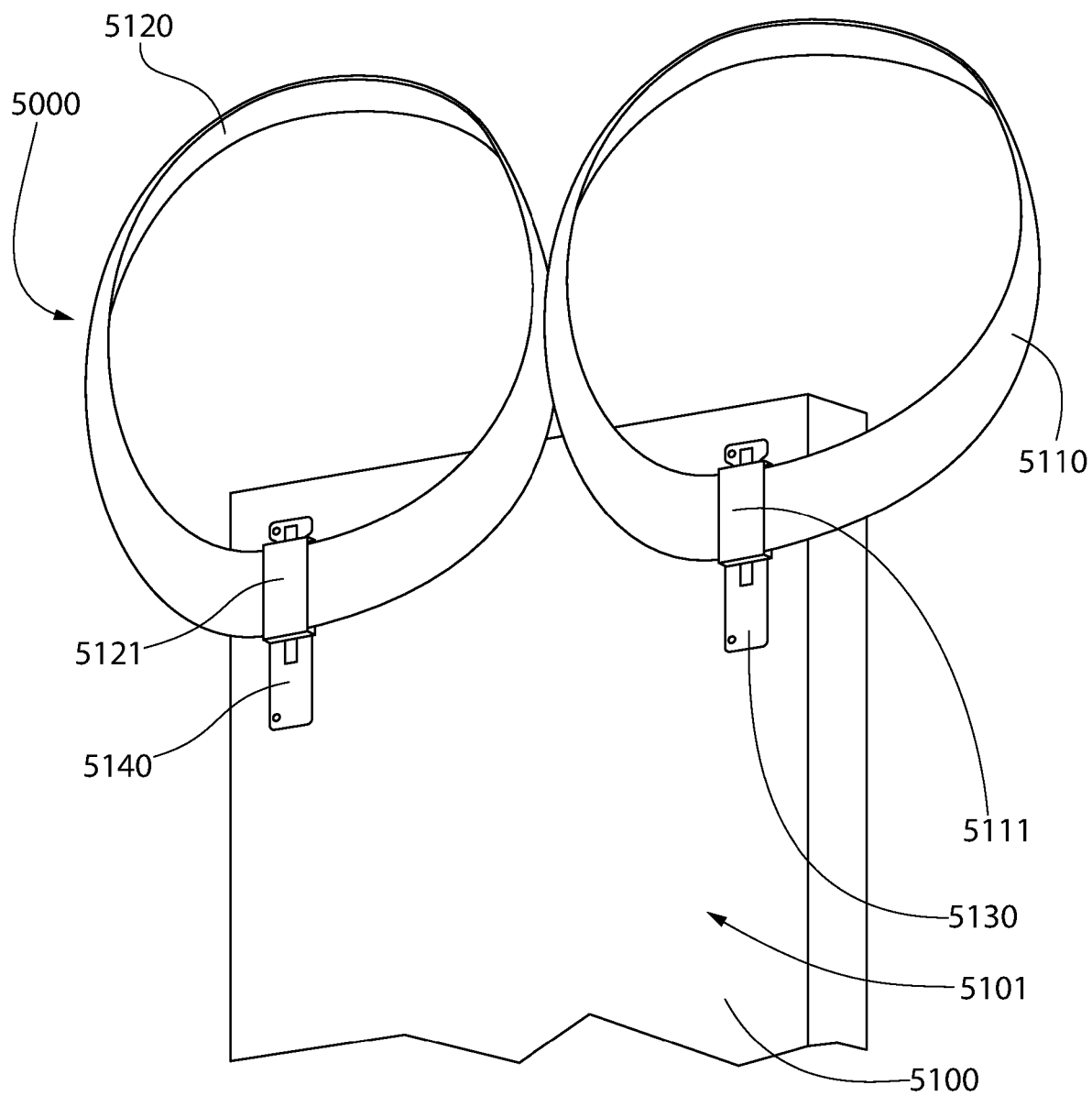


FIG. 43B

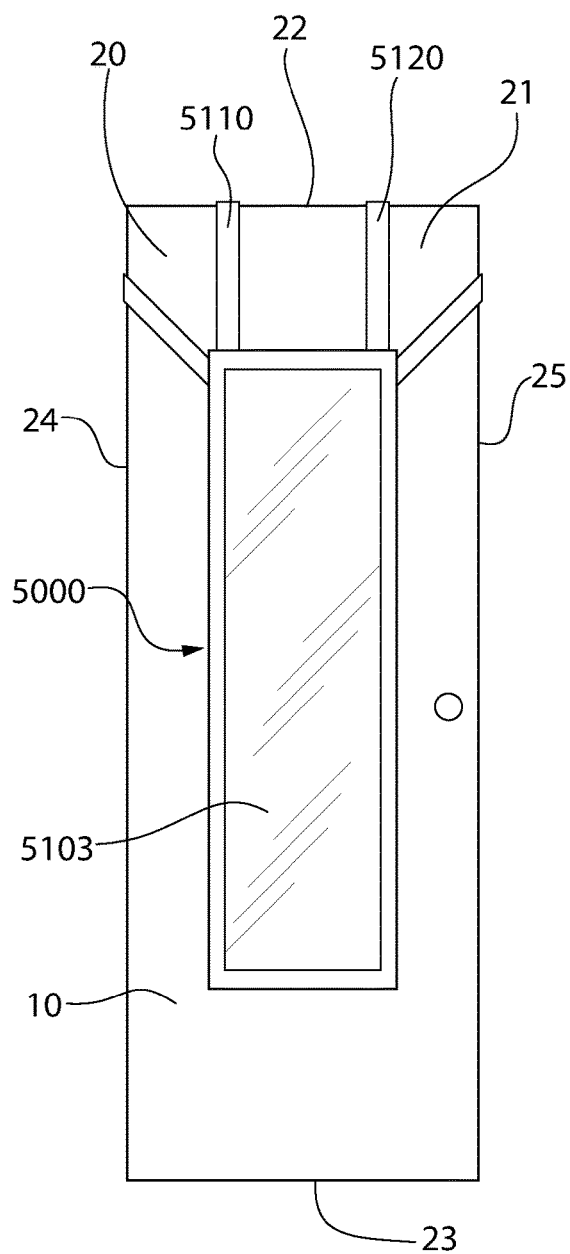


FIG. 43C

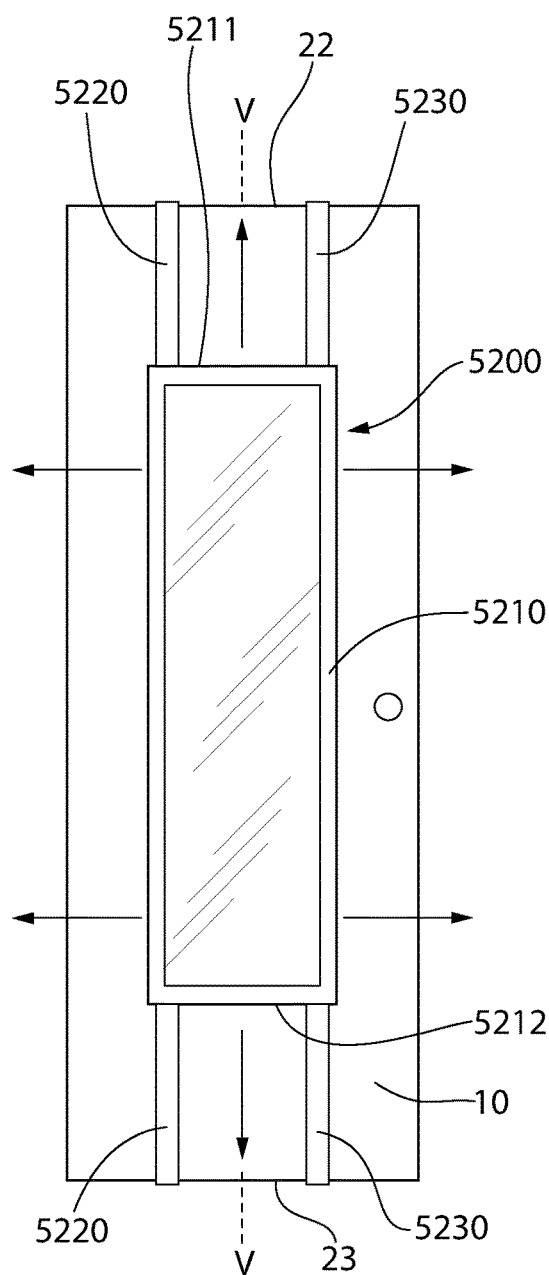
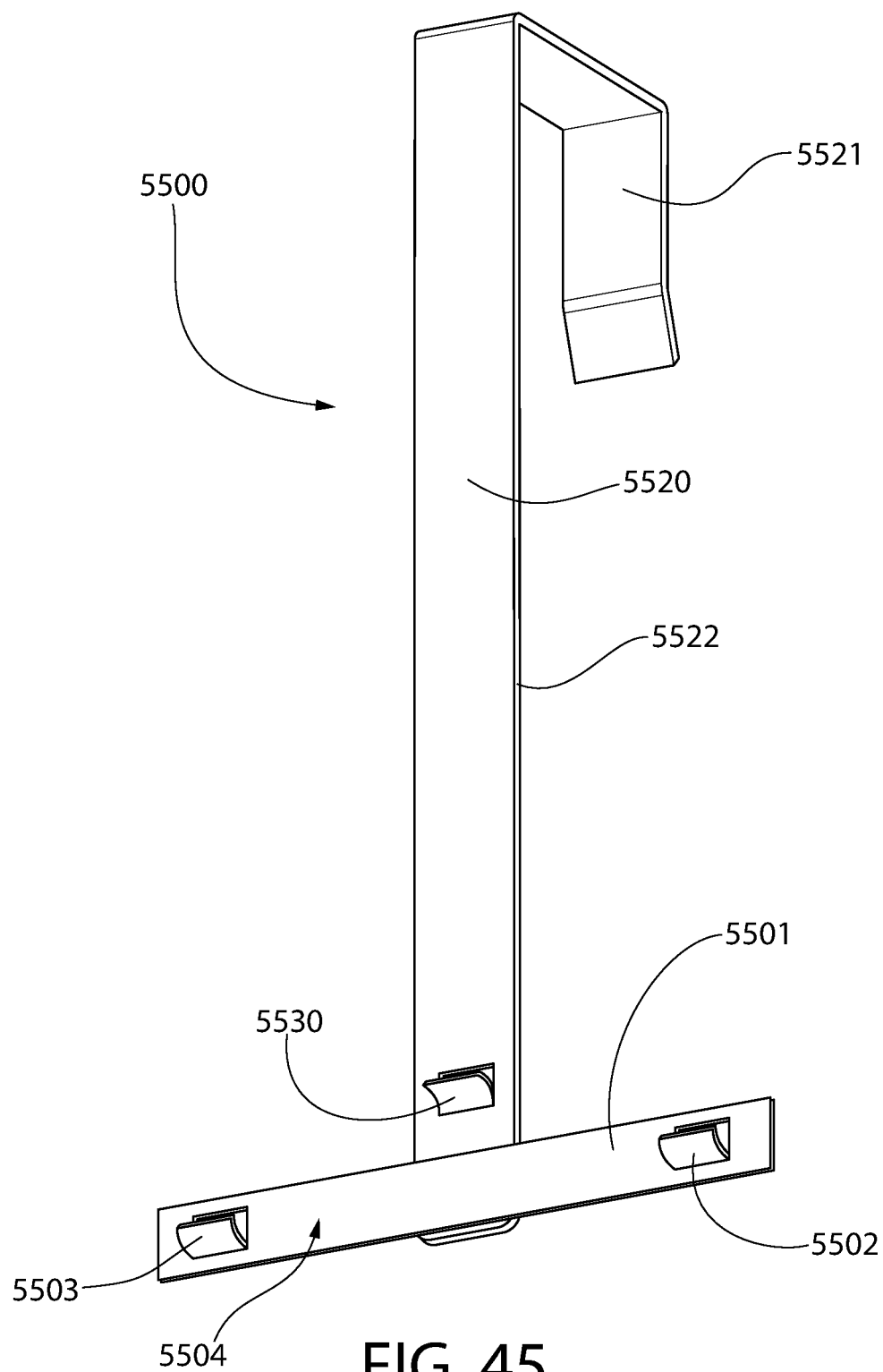


FIG. 44





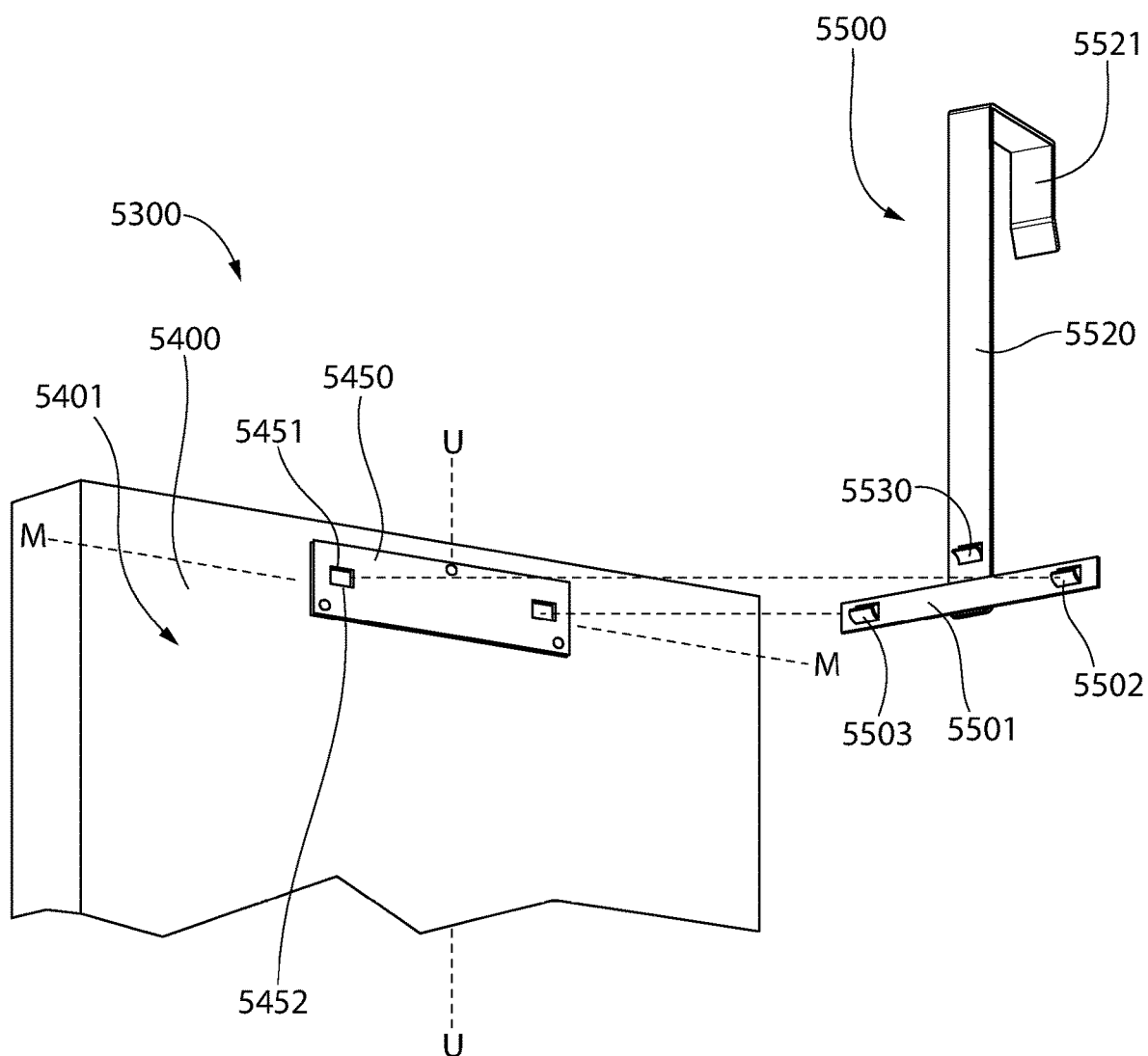


FIG. 46A

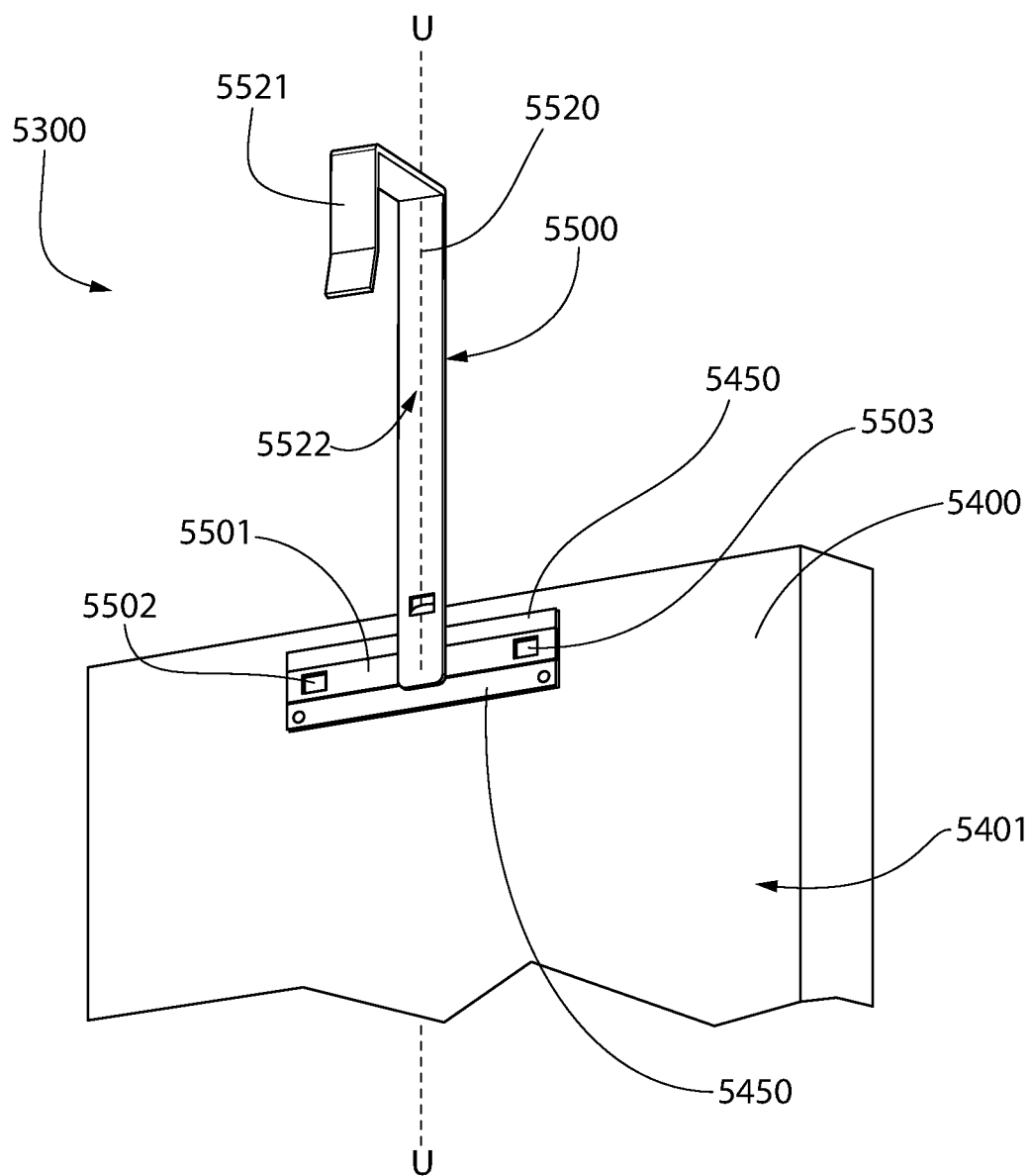


FIG. 46B

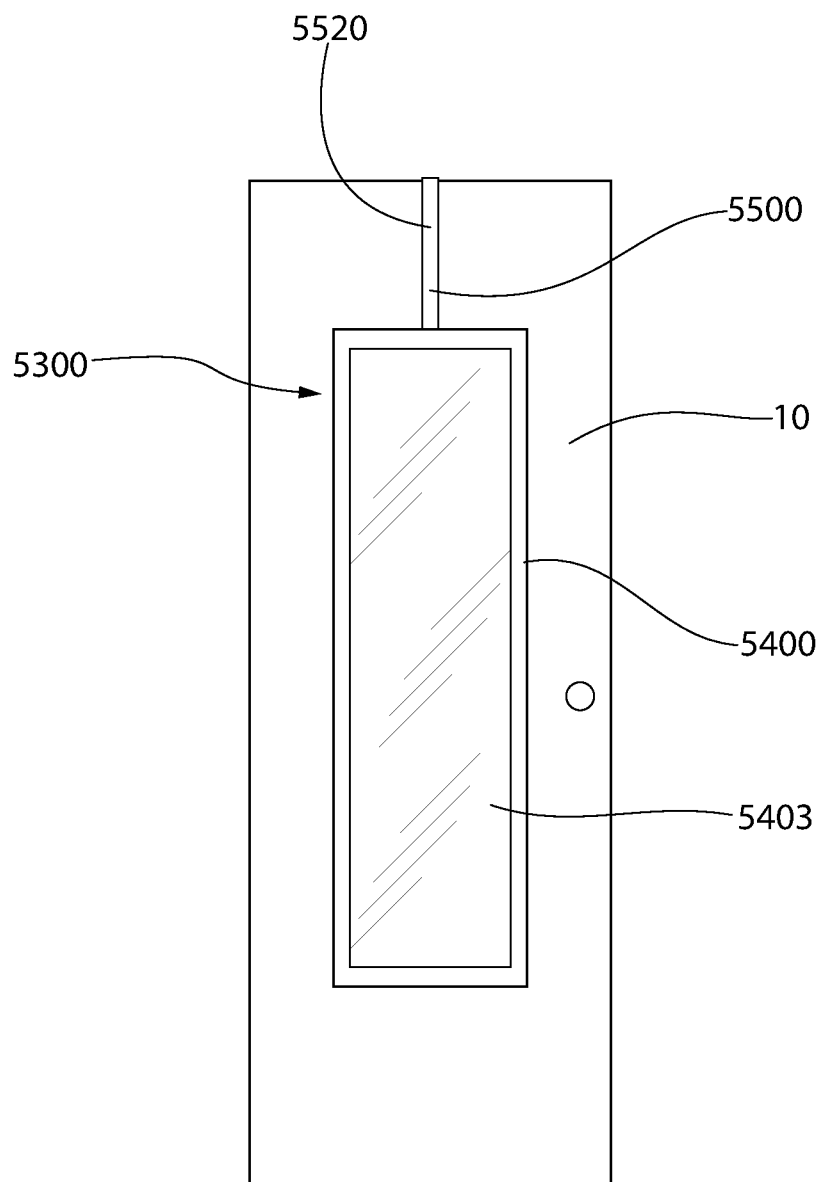


FIG. 46C

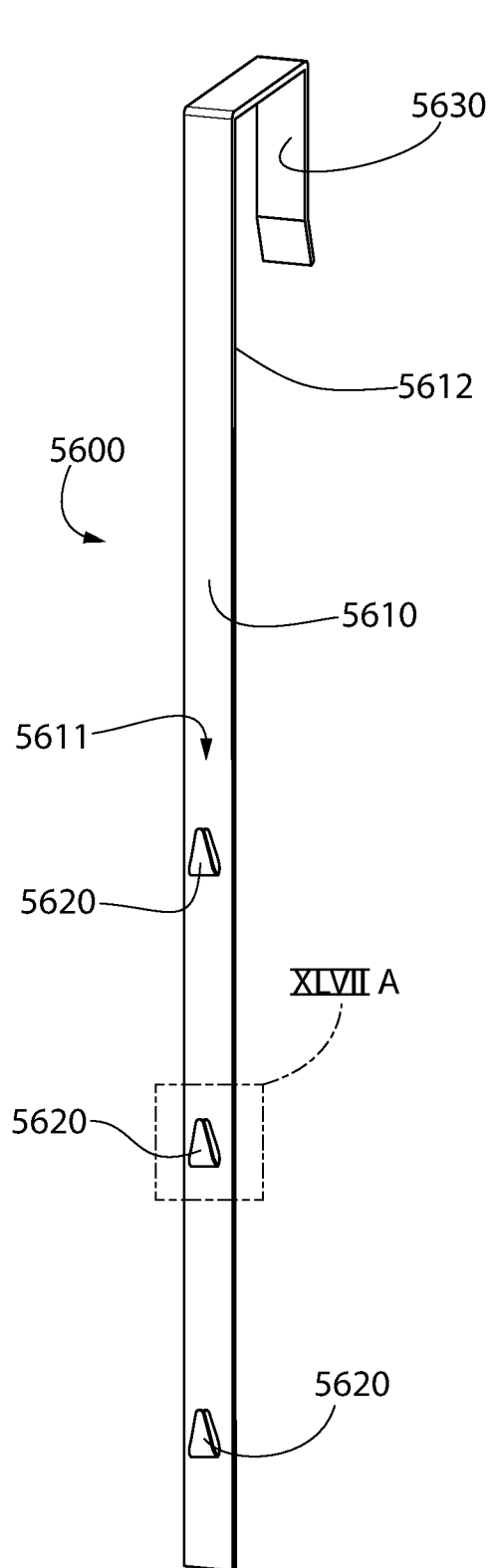


FIG. 47

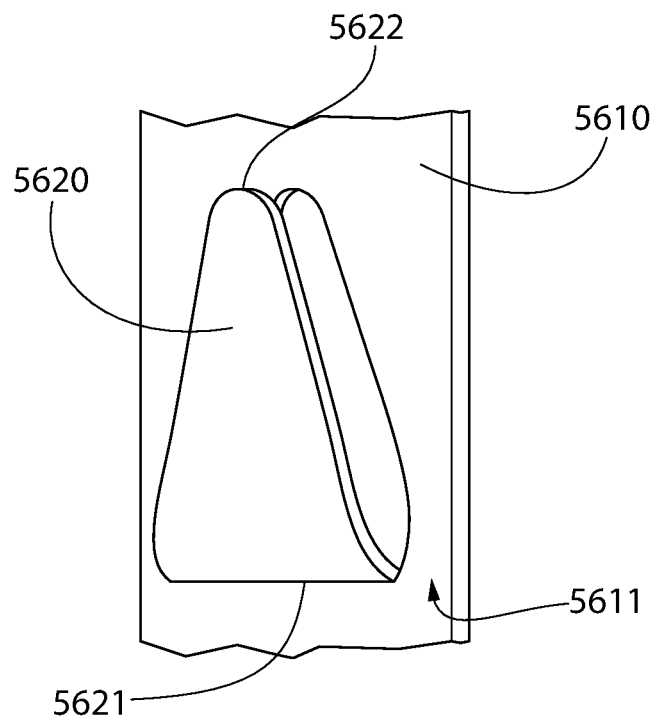


FIG. 47A

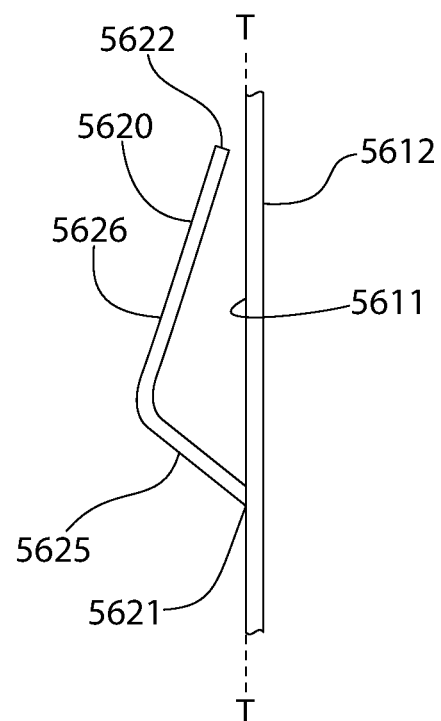


FIG. 47B

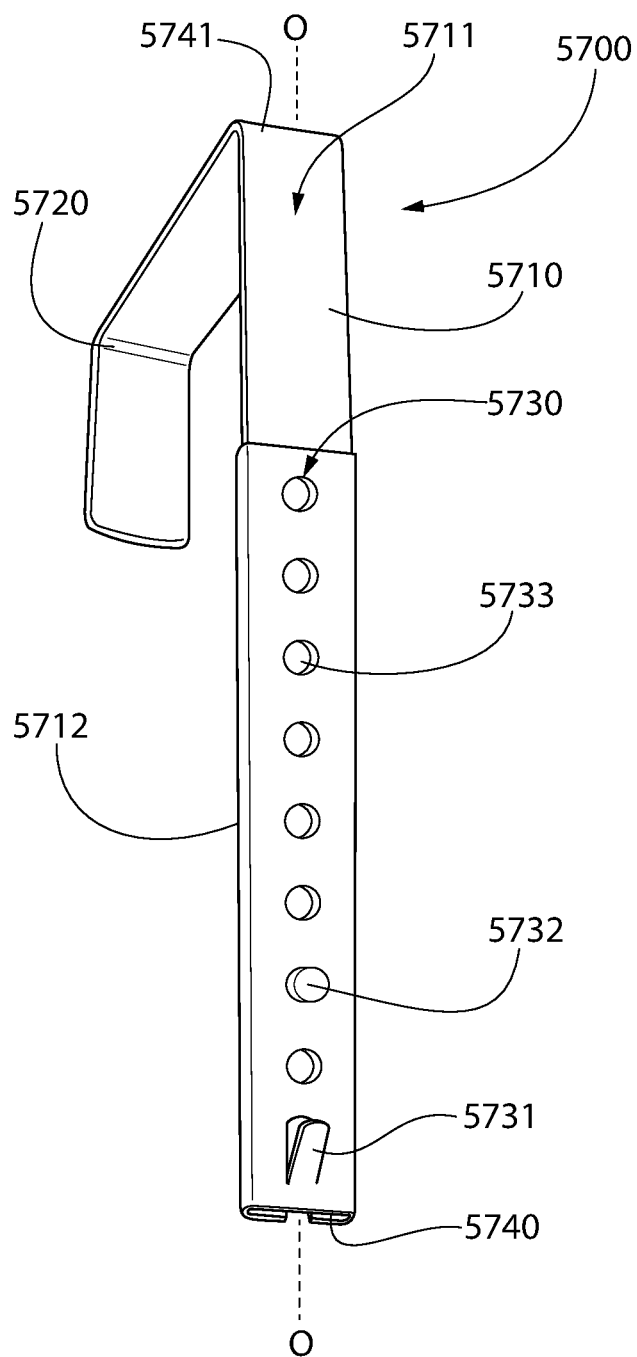


FIG. 48

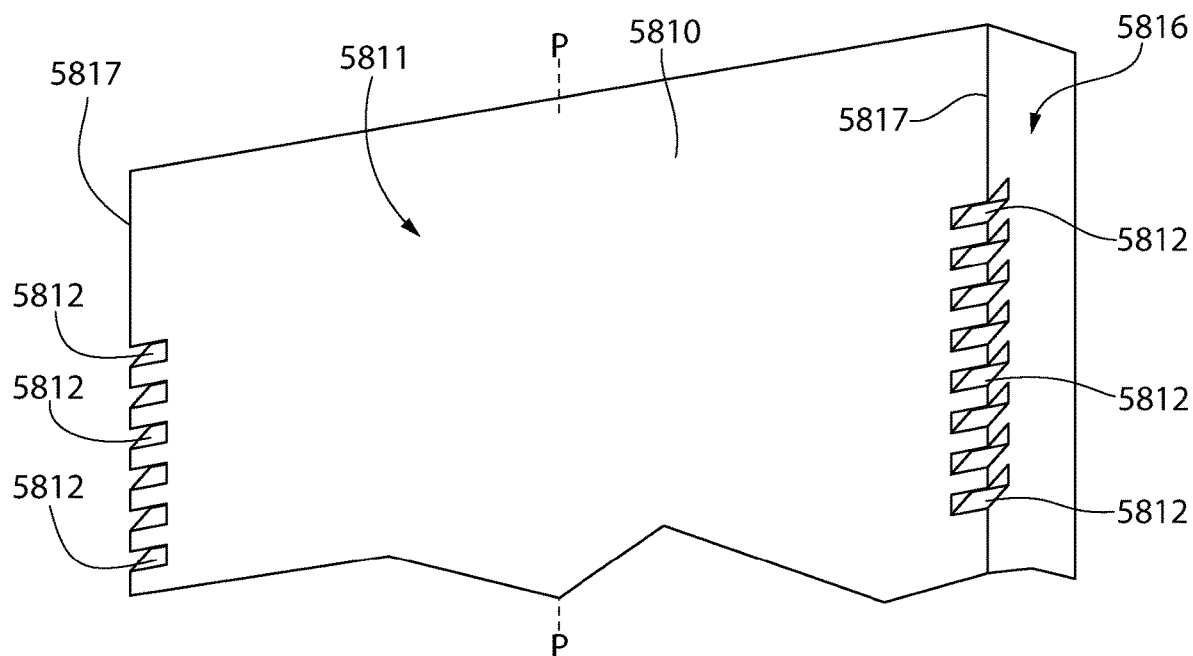


FIG. 49A

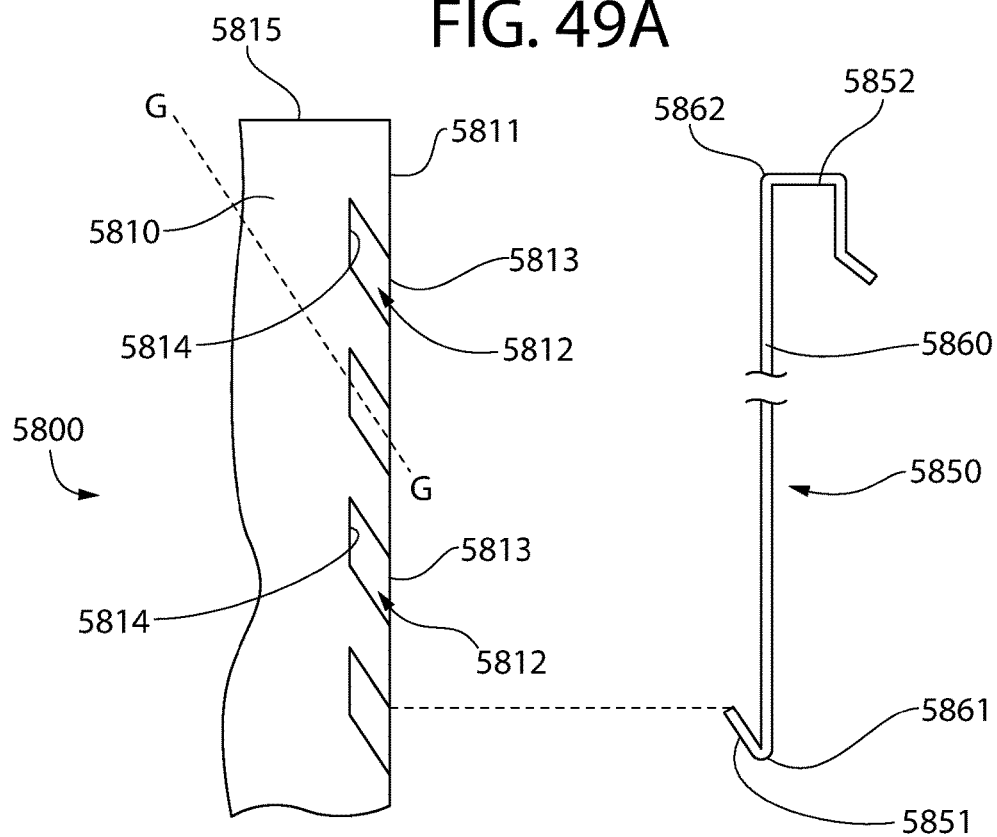


FIG. 49B

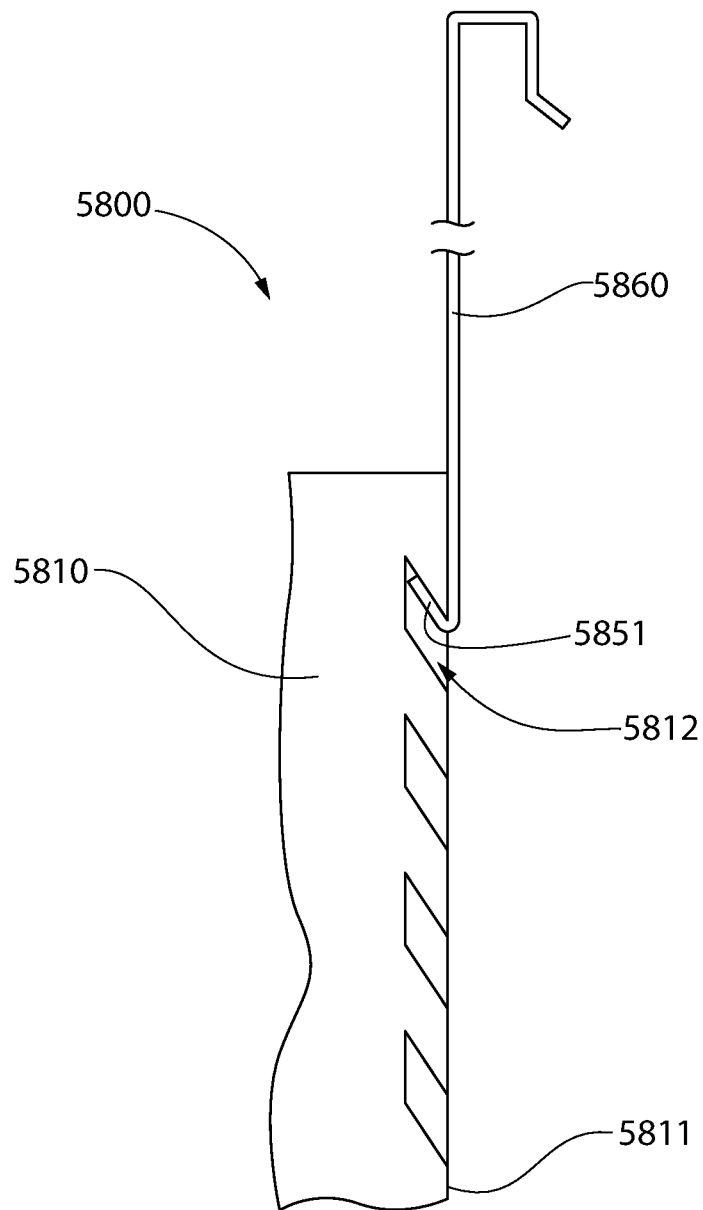


FIG. 49C



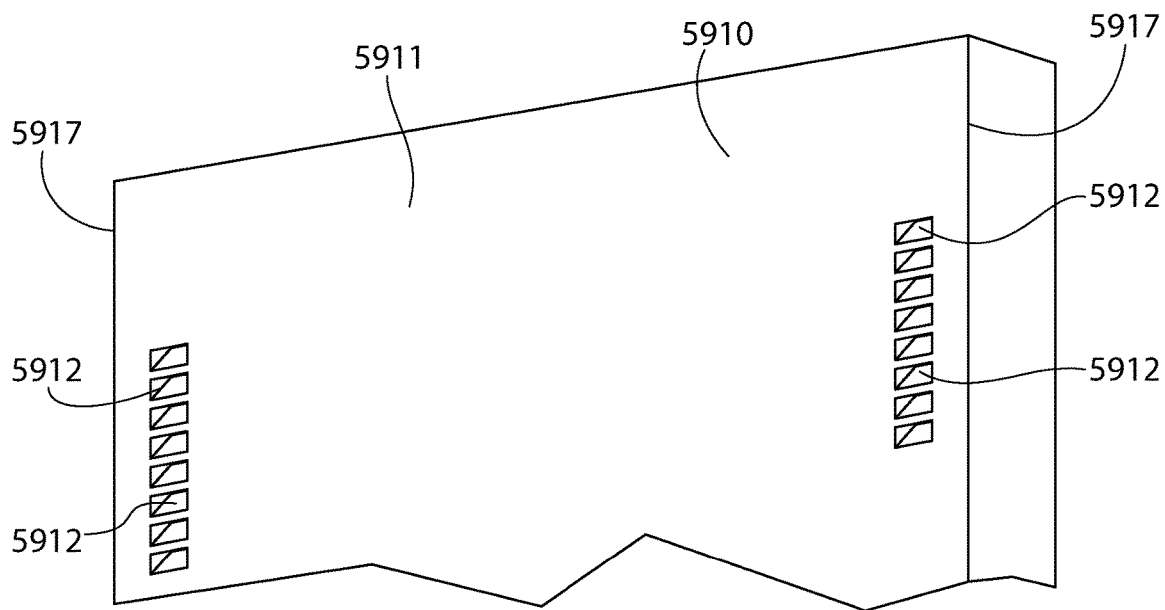


FIG. 50

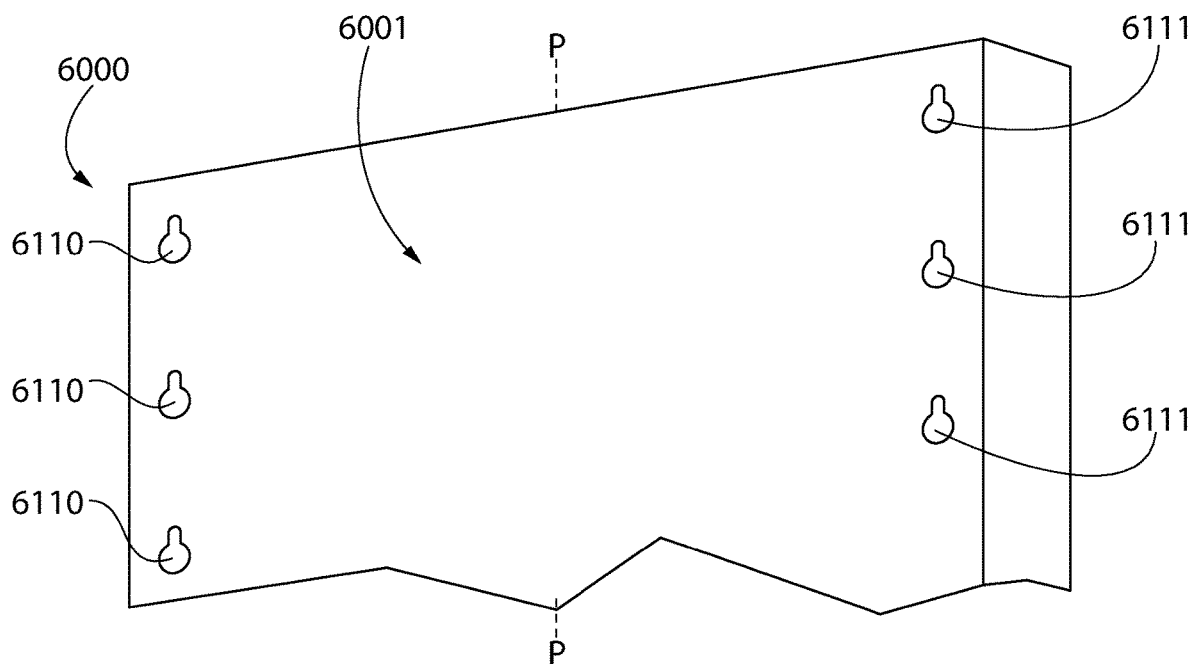
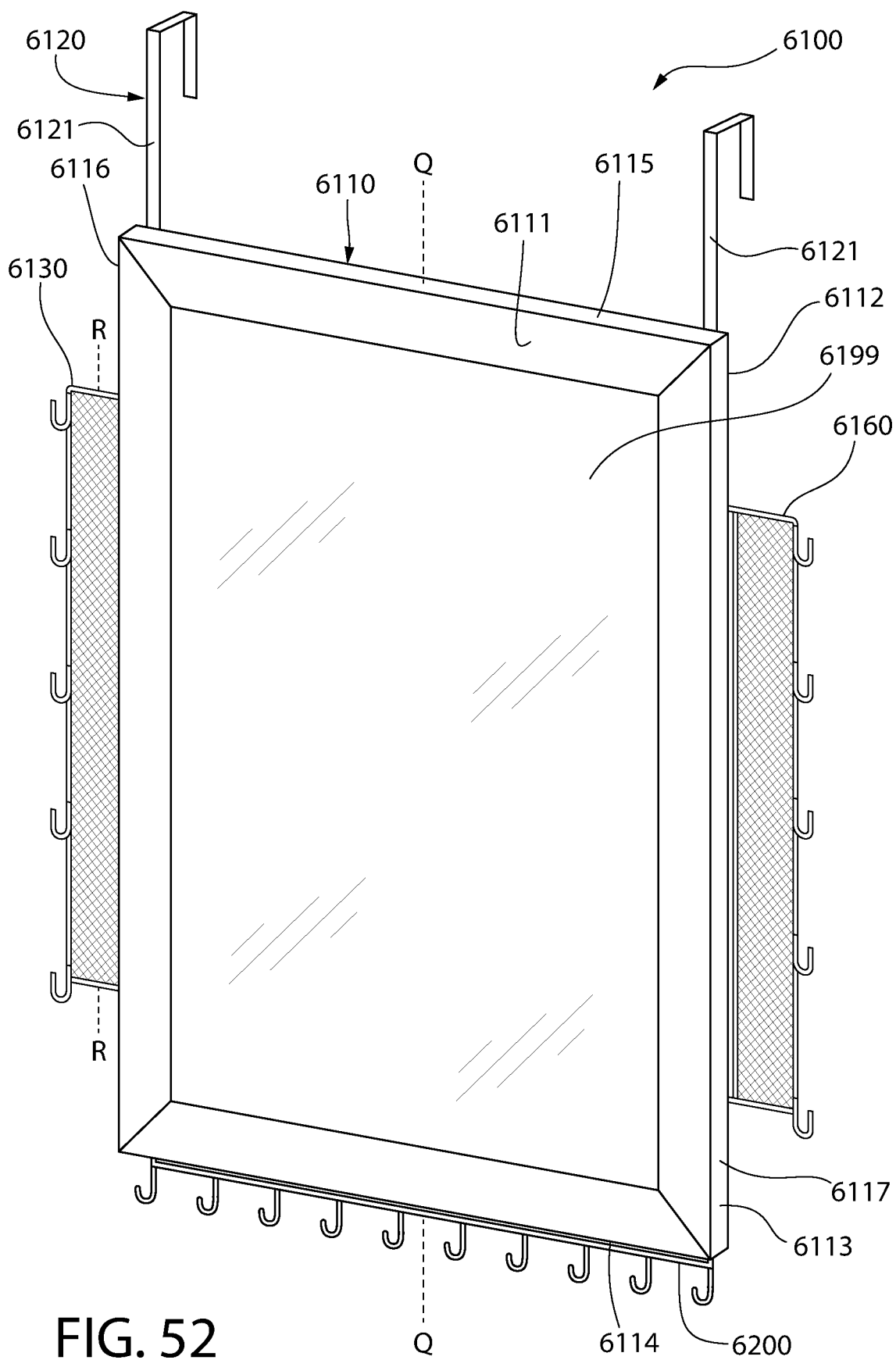


FIG. 51



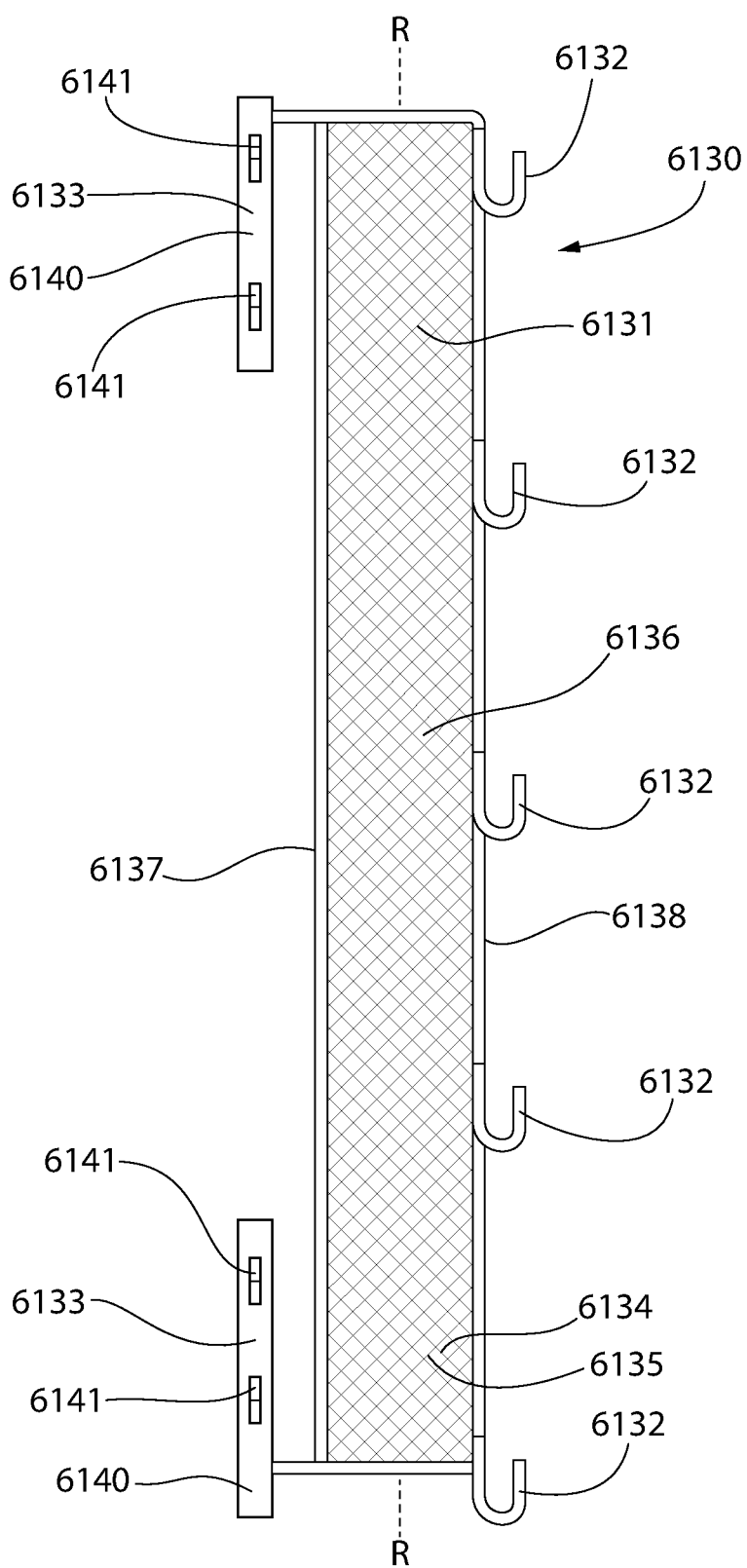


FIG. 53

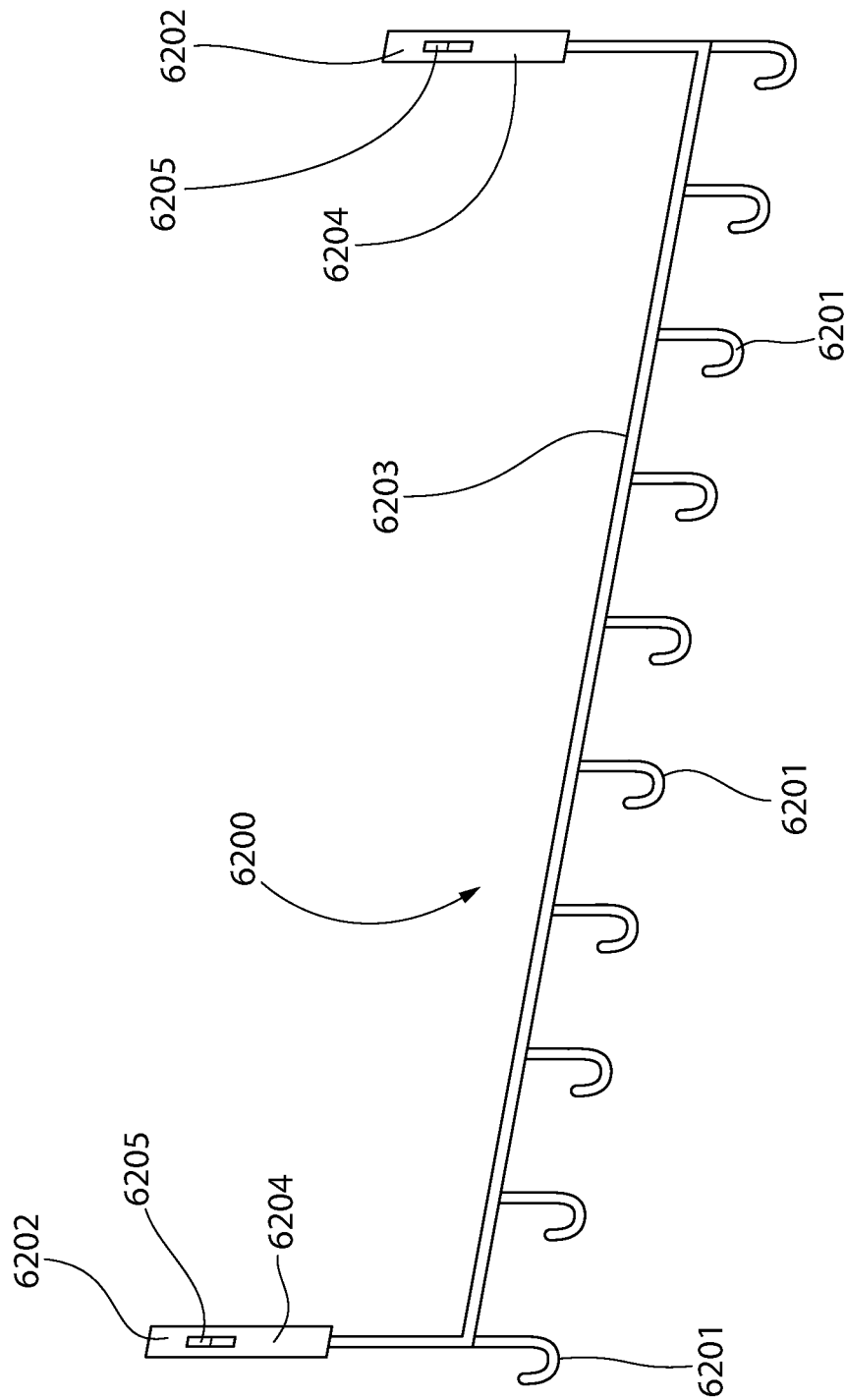


FIG. 54

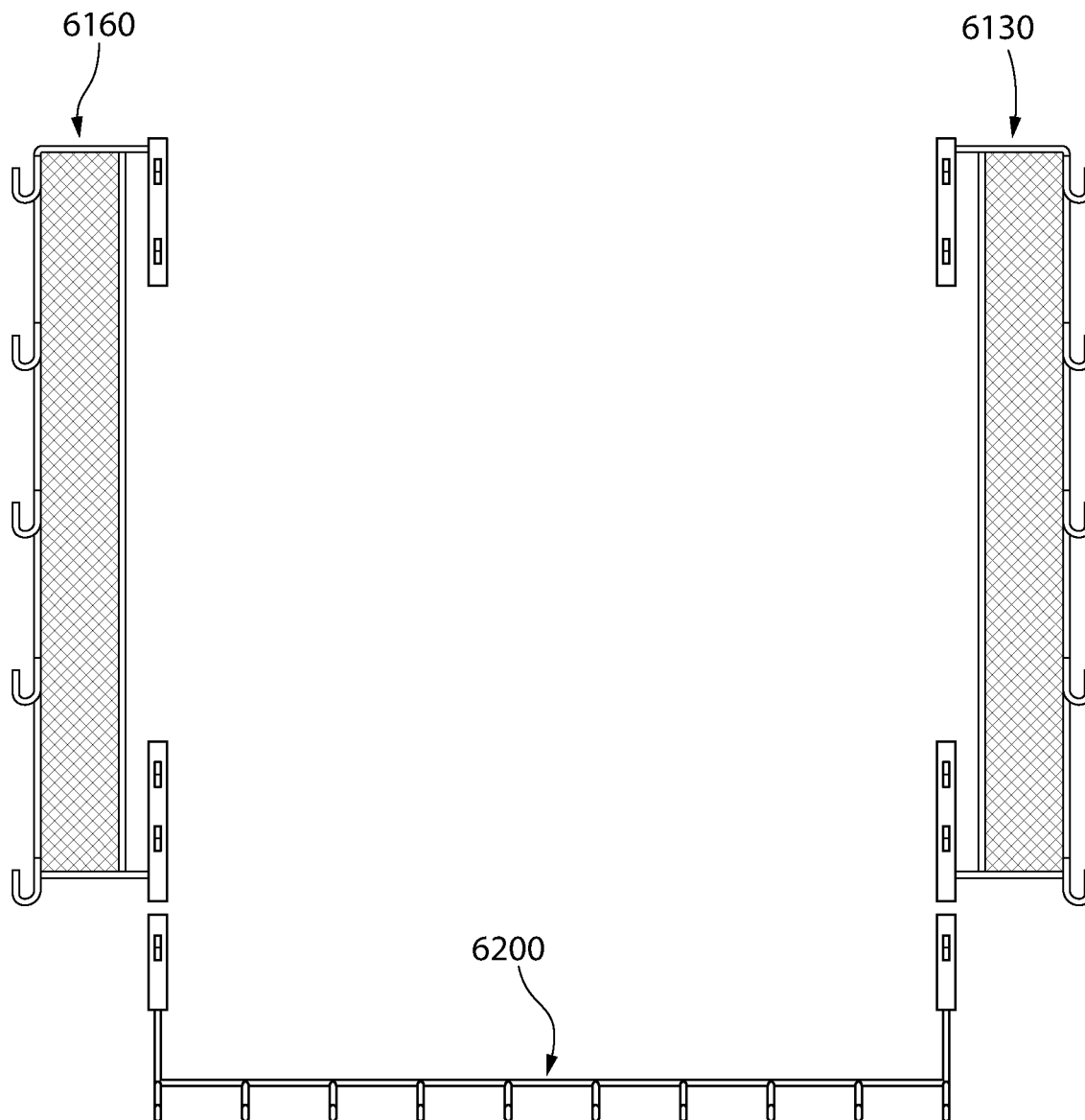


FIG. 55

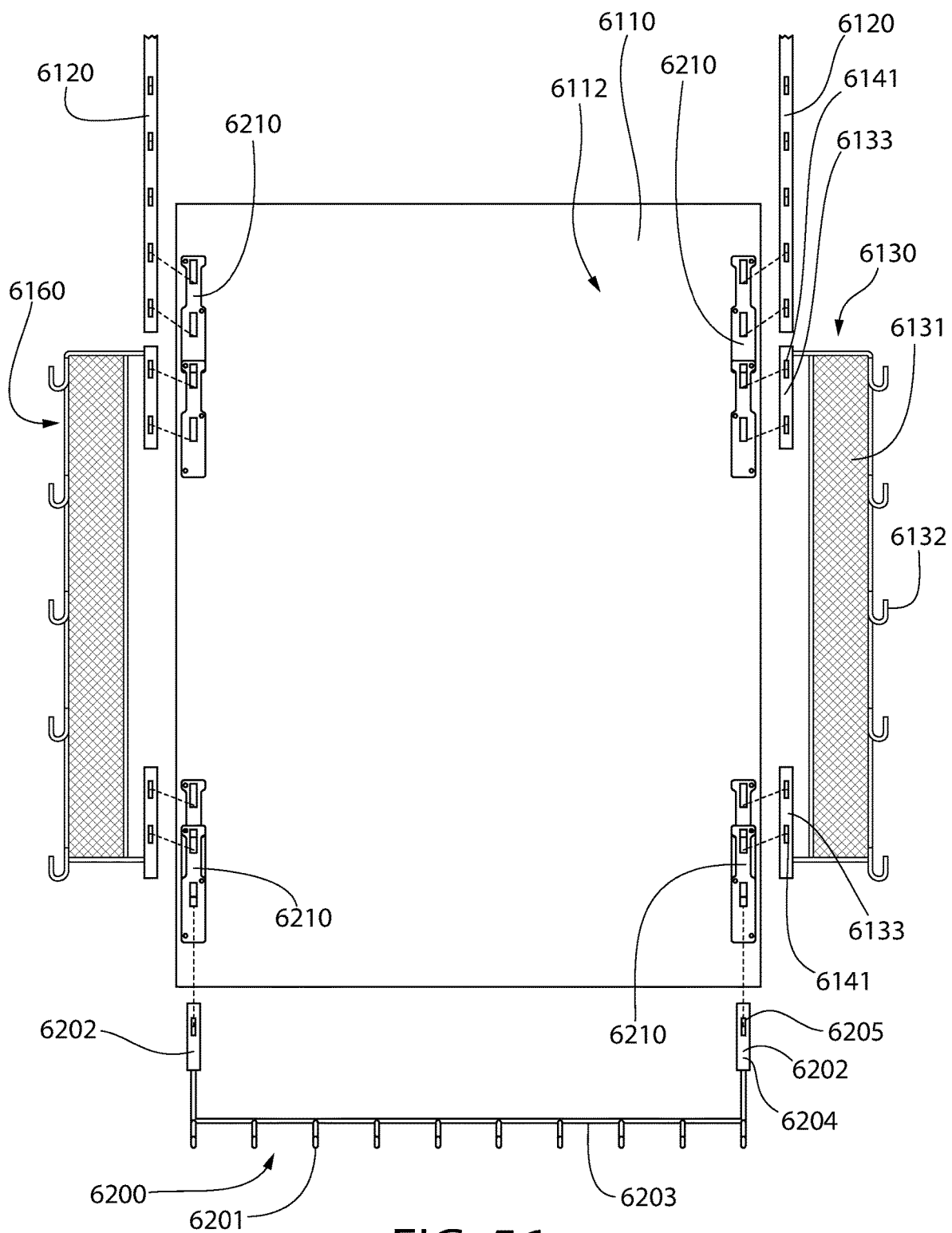


FIG. 56

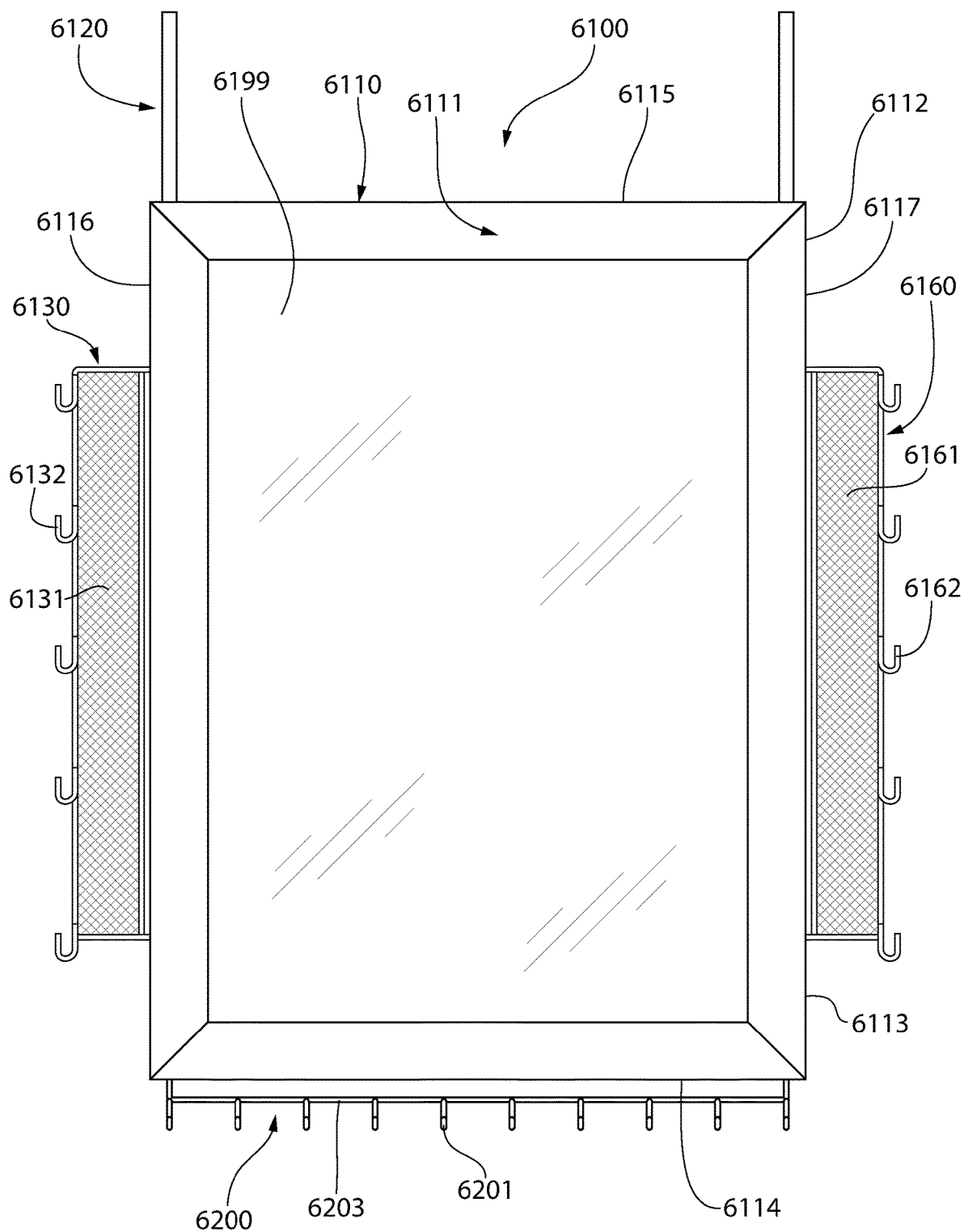


FIG. 57

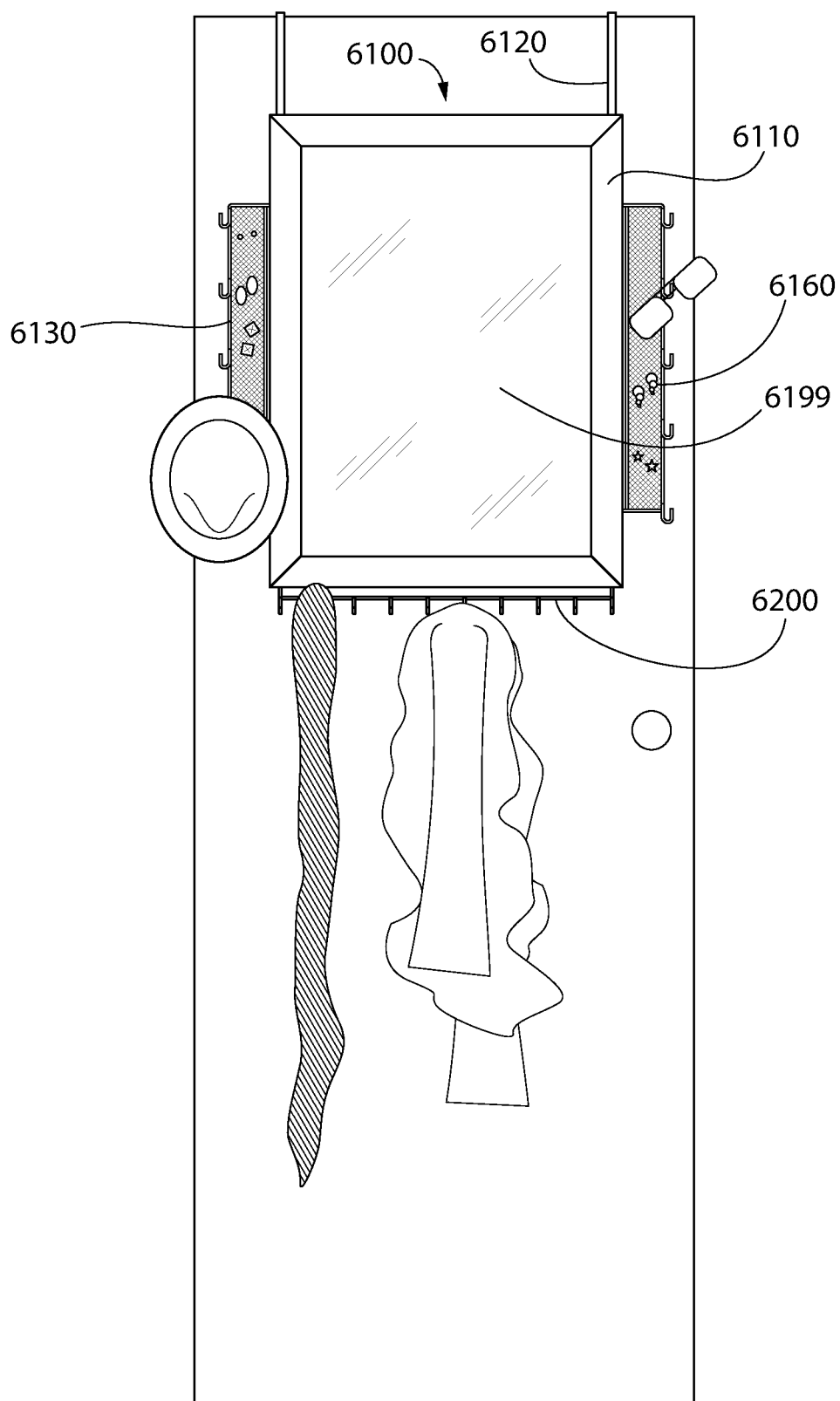


FIG. 58



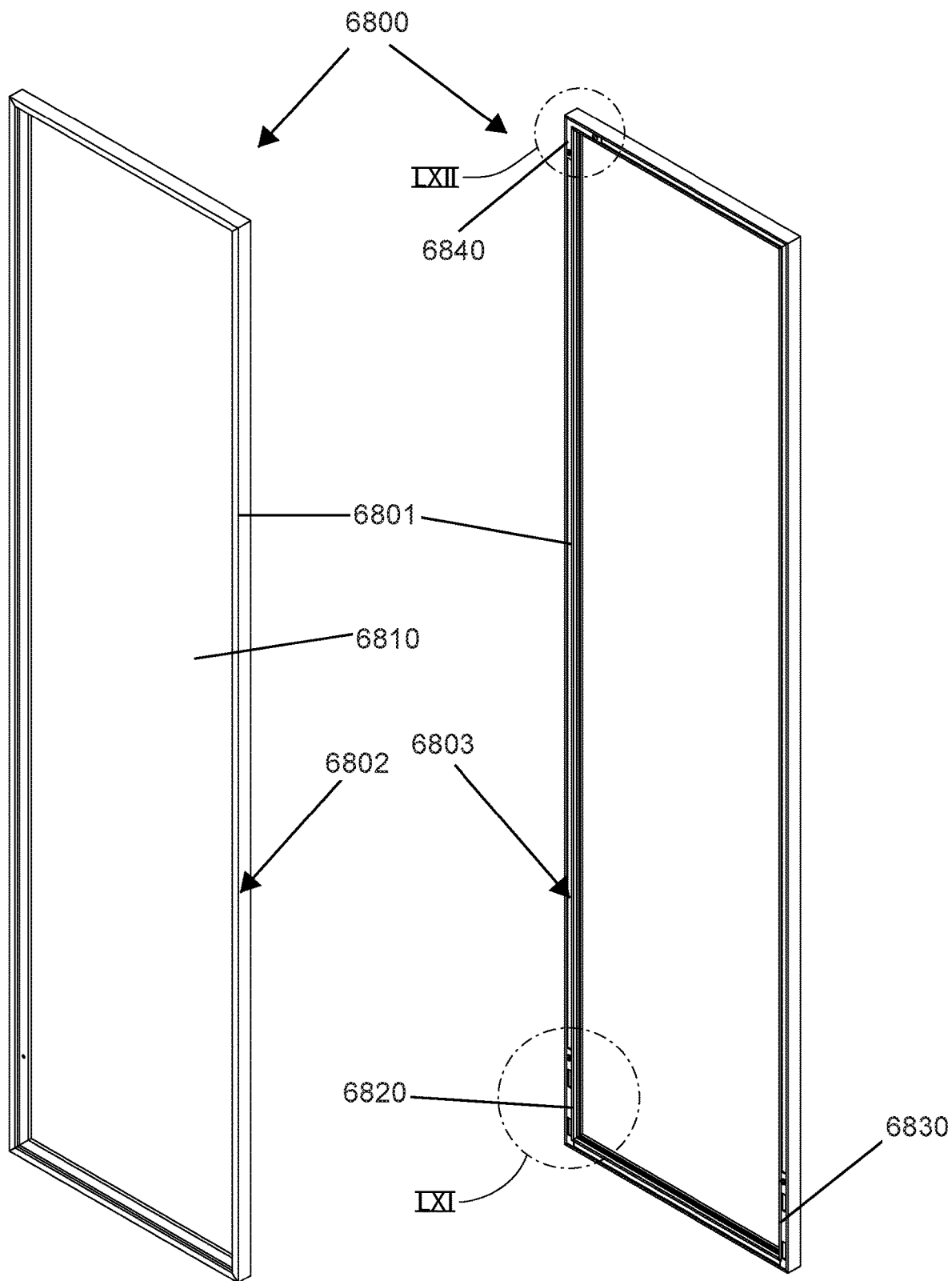


FIG. 59A

FIG. 59B

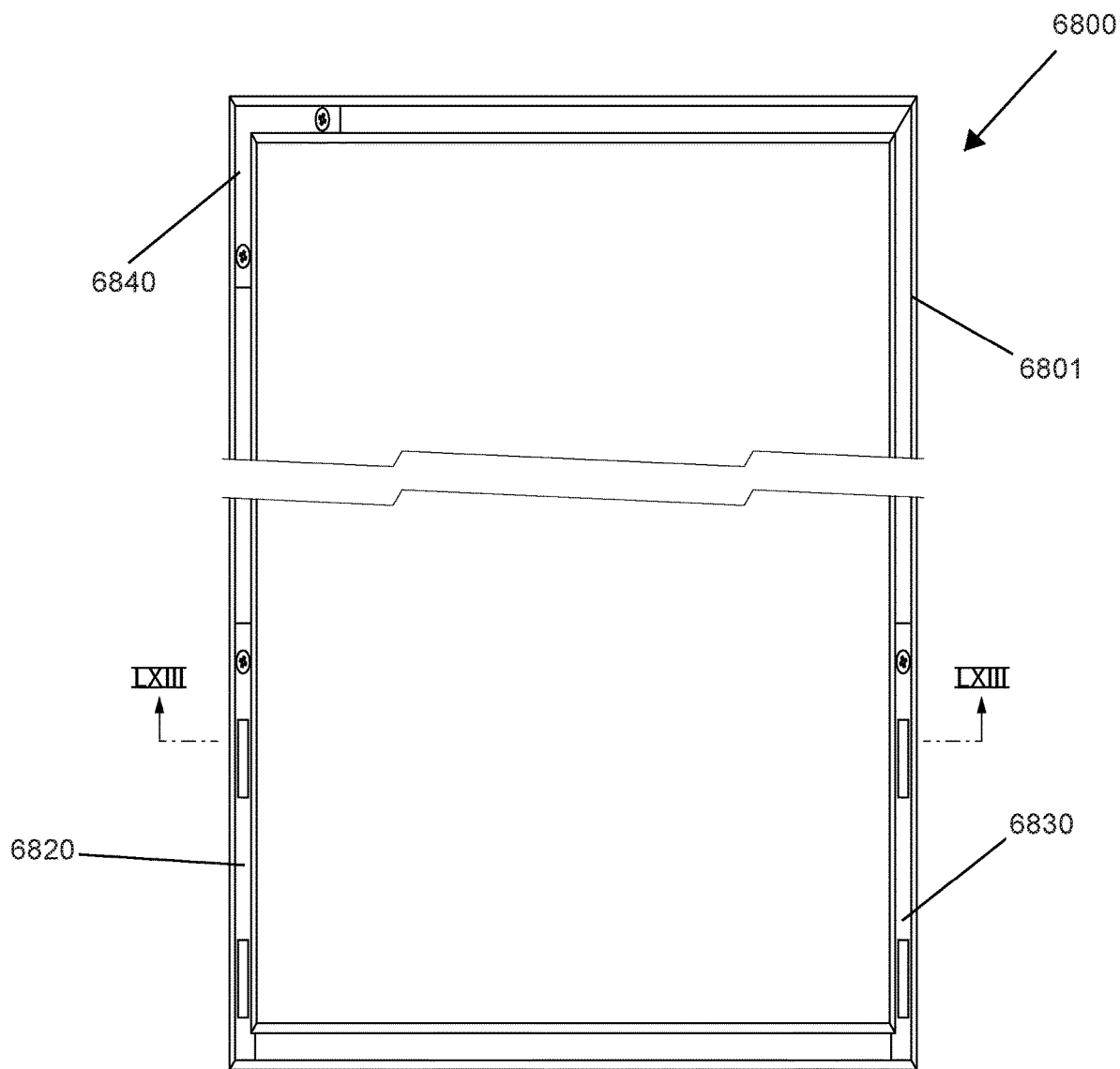


FIG. 60

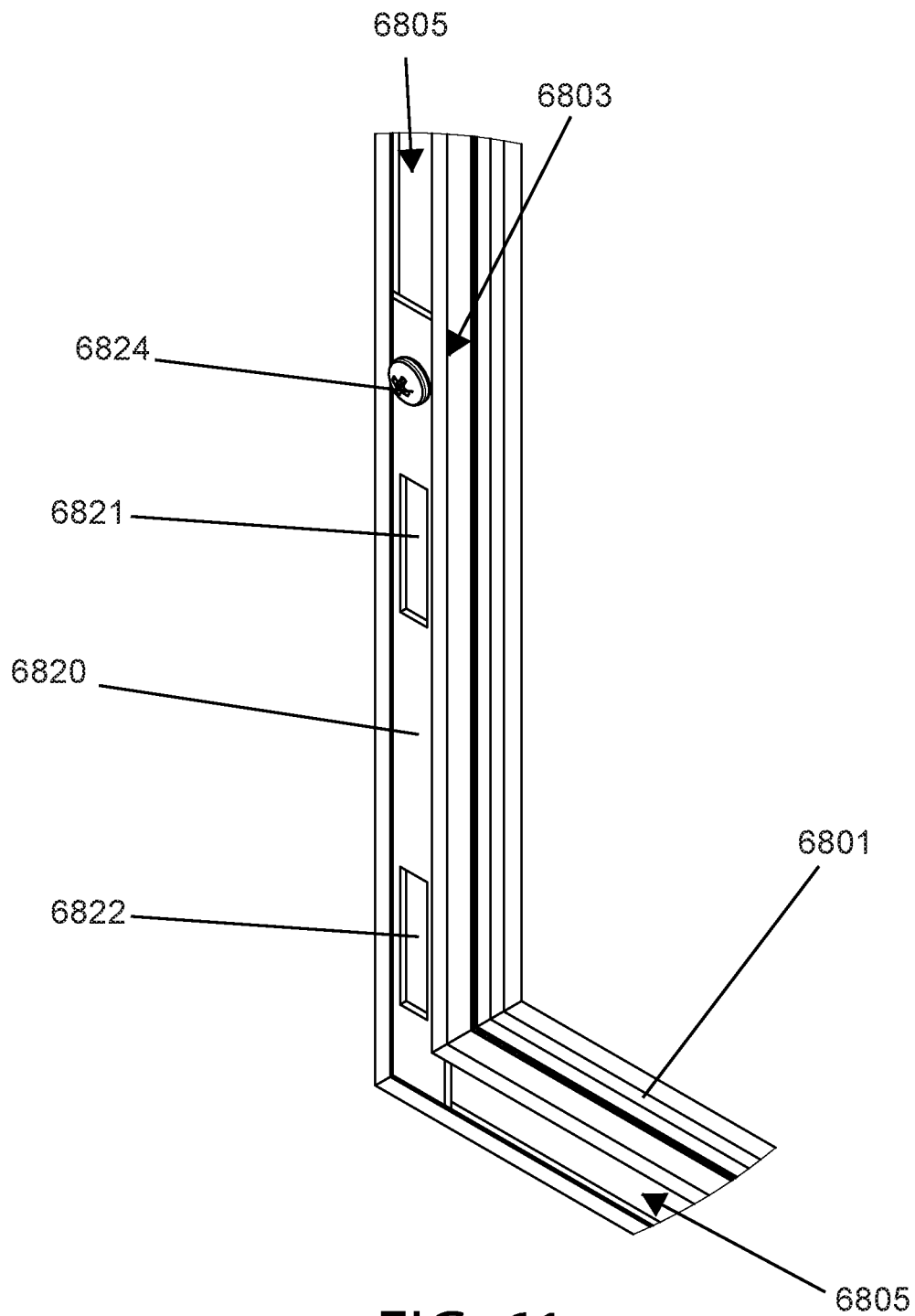


FIG. 61

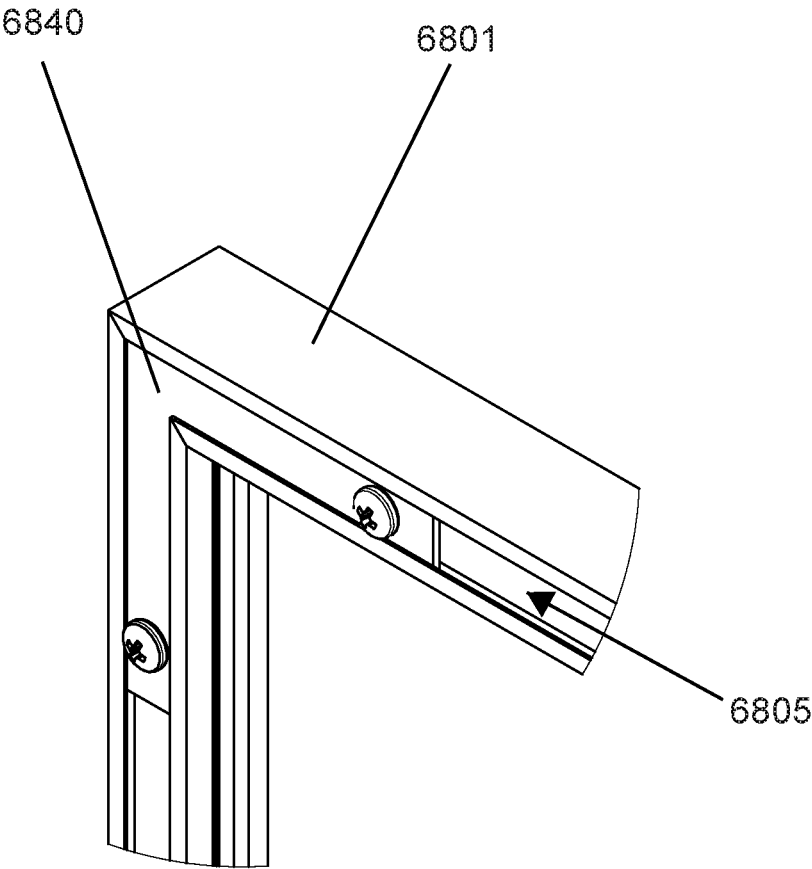
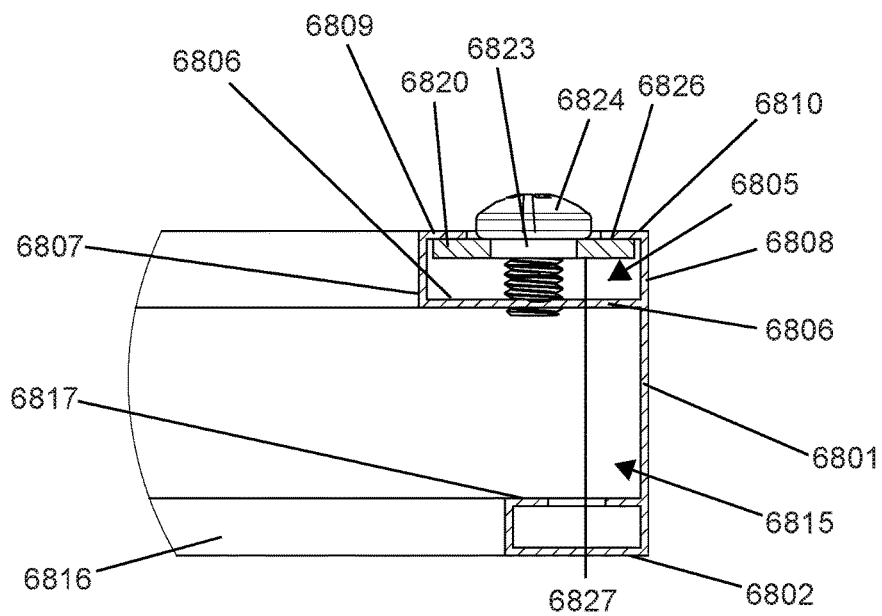
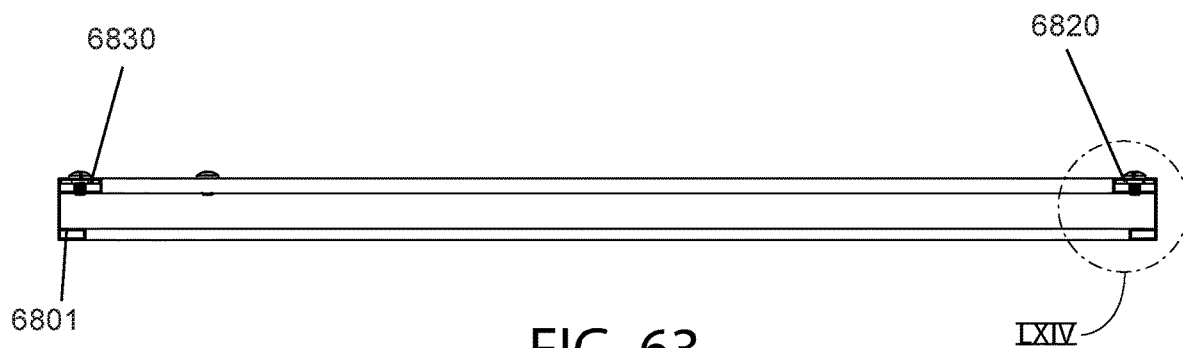
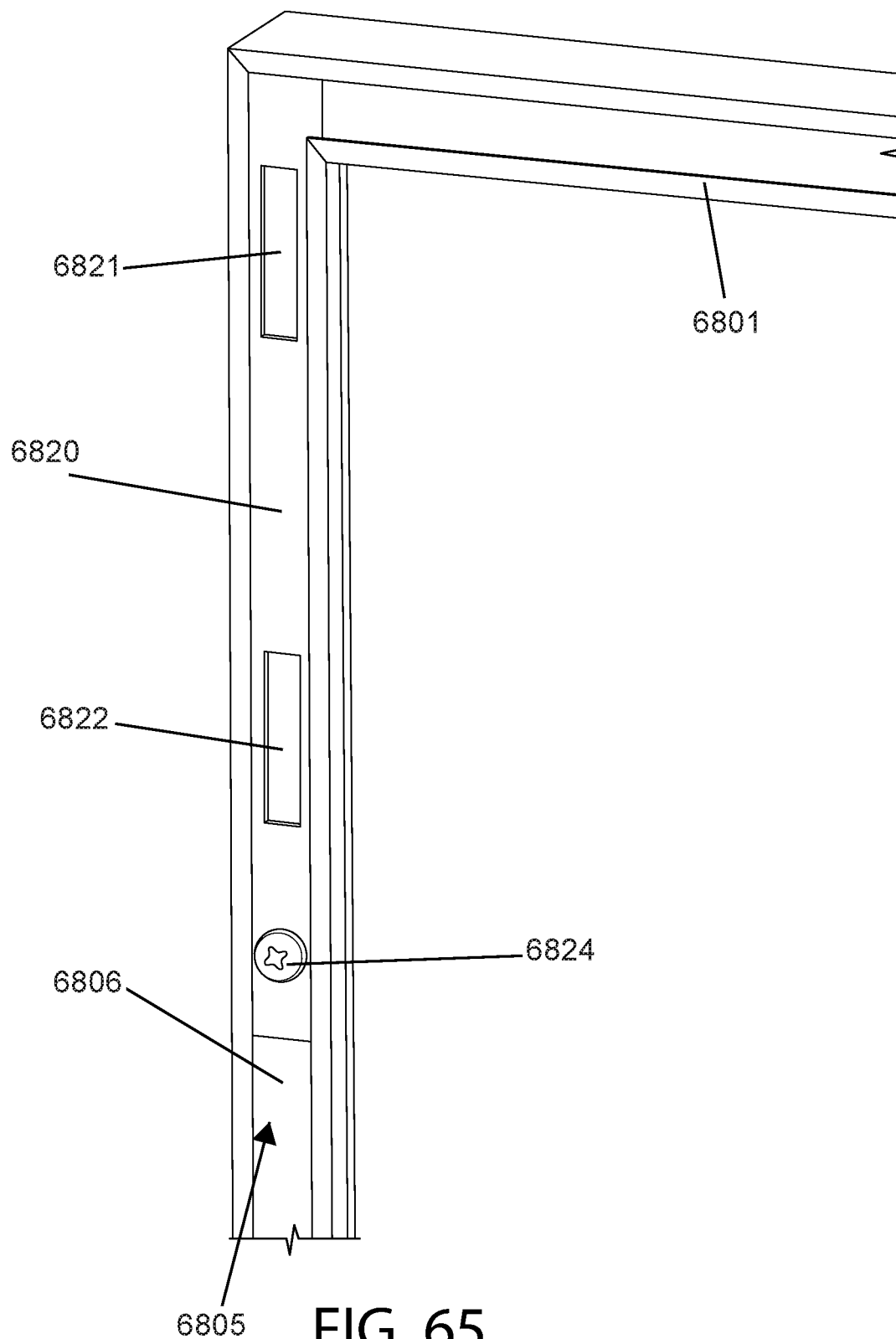
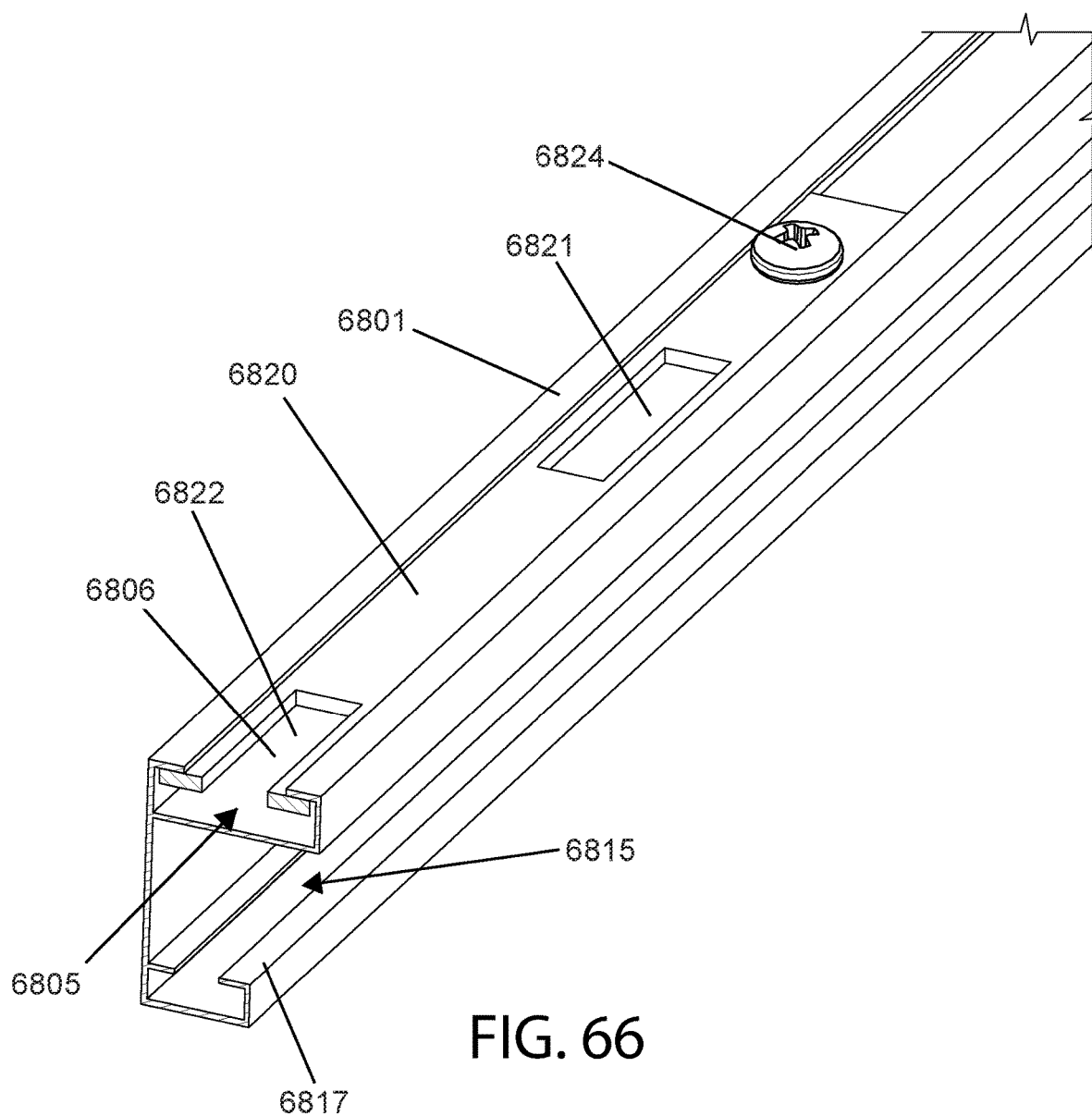


FIG. 62







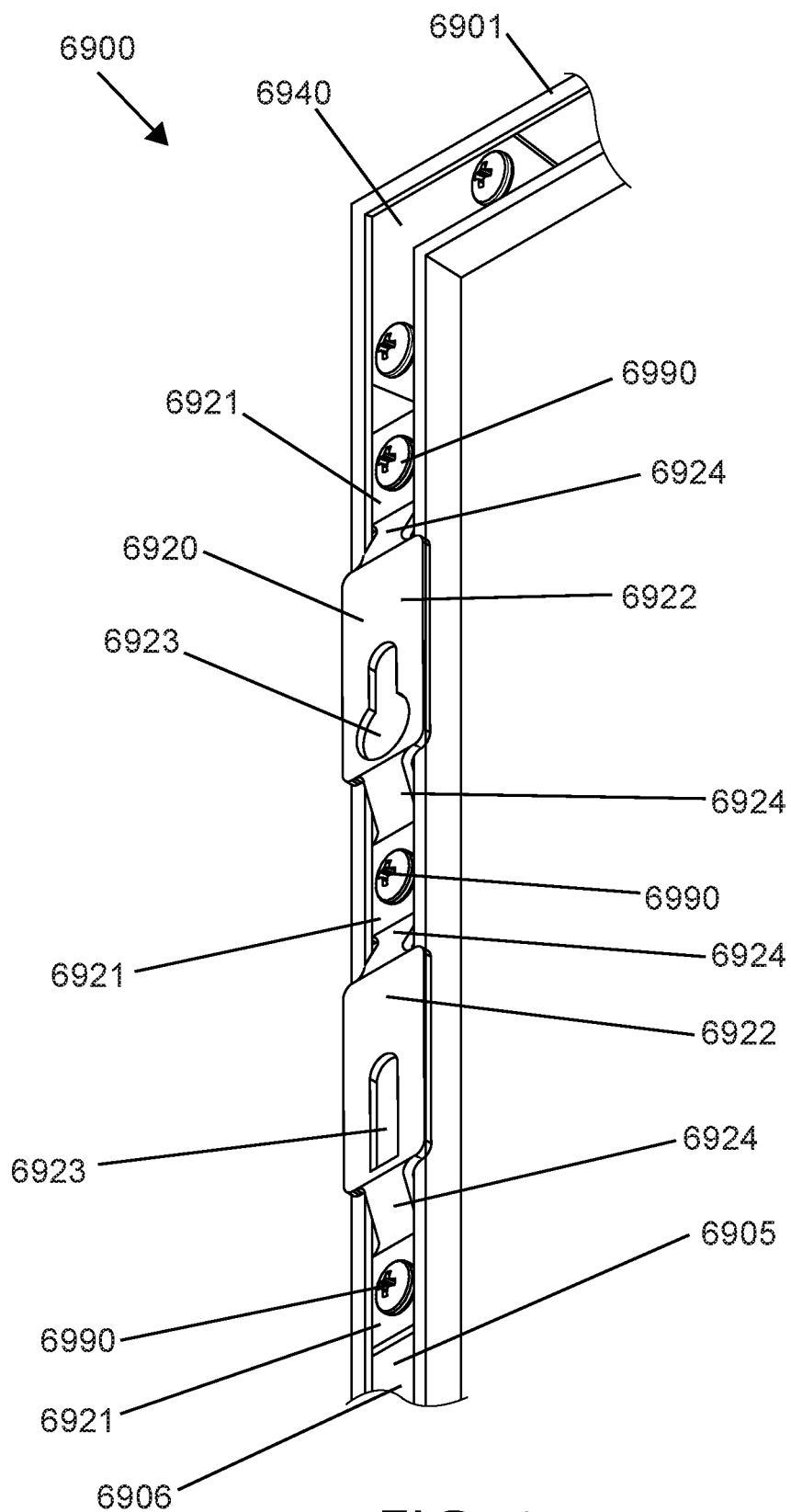


FIG. 67



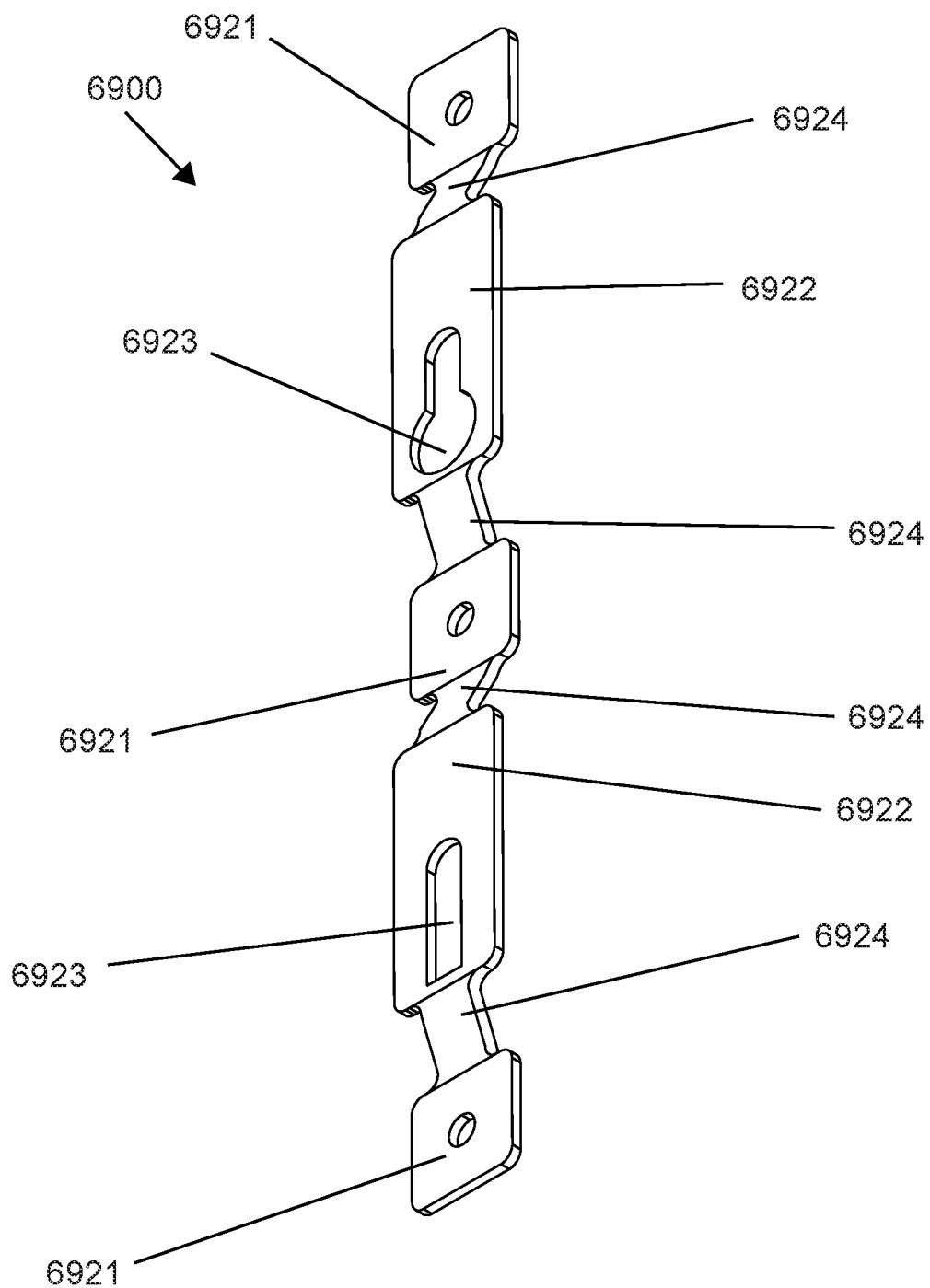


FIG. 68

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**OVER-THE-DOOR HANGING APPARATUS****CROSS-REFERENCE TO RELATED PATENT APPLICATIONS**

The present application is a continuation of U.S. patent application Ser. No. 15/931,951, filed May 14, 2020, which: (1) claims the benefit of U.S. Provisional Patent Application Ser. No. 62/848,834, filed May 16, 2019; and (2) is a continuation-in-part of U.S. patent application Ser. No. 16/192,218, filed Nov. 15, 2018.

U.S. patent application Ser. No. 16/192,218 claims the benefit of U.S. Provisional Patent Application Ser. No. 62/586,263, filed Nov. 15, 2017. U.S. patent application Ser. No. 16/192,218 is also a continuation-in-part of U.S. patent application Ser. No. 15/726,865, filed Oct. 6, 2017, now U.S. Pat. No. 10,238,221, which: (1) claims the benefit of U.S. Provisional Patent Application Ser. No. 62/405,325, filed Oct. 7, 2016; and (2) is a continuation-in-part of U.S. patent application Ser. No. 15/652,586, filed Jul. 18, 2017, now U.S. Pat. No. 9,801,478, which is a continuation of U.S. patent application Ser. No. 15/475,963, filed Mar. 31, 2017, now U.S. Pat. No. 10,080,448, which in turn: (1) is a continuation-in-part of U.S. patent application Ser. No. 15/297,291, filed Oct. 19, 2016, now U.S. Pat. No. 9,622,600; and (2) claims the benefit of U.S. Provisional Patent Application Ser. No. 62/405,325, filed Oct. 7, 2016.

U.S. patent application Ser. No. 15/297,291, filed Oct. 19, 2016, is a continuation of U.S. patent application Ser. No. 15/084,102, filed Mar. 29, 2016, now U.S. Pat. No. 9,480,350, which in turn: (1) claims the benefit of U.S. Provisional Patent Application Ser. No. 62/216,703, filed Sep. 10, 2015; and (2) is a continuation-in-part of U.S. patent application Ser. No. 14/747,656, filed Jun. 23, 2015, now U.S. Pat. No. 9,386,867.

U.S. patent application Ser. No. 14/747,656, filed Jun. 23, 2015, is a continuation-in-part of U.S. patent application Ser. No. 14/300,834, filed Jun. 10, 2014, now U.S. Pat. No. 9,060,627, which in turn is a continuation of U.S. patent application Ser. No. 14/028,839, filed Sep. 17, 2013, now U.S. Pat. No. 8,746,644, which in turn is a continuation of U.S. patent application Ser. No. 12/915,747, filed Oct. 29, 2010, now U.S. Pat. No. 8,534,627, which in turn claims the benefit of U.S. Provisional Patent Application Ser. No. 61/334,914, filed May 14, 2010.

The entirety of each of the above-referenced applications is incorporated herein by reference.

**BACKGROUND OF THE INVENTION**

Mirrors are used often in everyday life. For example, the first thing that a person does after waking up is go to the bathroom and look at him or herself in the mirror. Furthermore, people also typically look at themselves in the mirror prior to leaving the house to make sure that they are pleased with their appearance. A very common room in the home for a person to desire to have a mirror is in the bedroom or the bathroom. However, there is not always a good place to put a mirror in those rooms. Therefore, it has been known to hang a mirror on a wall or from a door by using adhesives, screws, nails or hangers. Doors have been widely used to support mirrors because they provide convenient available space, because they may be removed to facilitate mounting of the mirror, and because they avoid the necessity of placing wall anchors in plaster or drywall.

In addition to mirrors, people often desire to hang other articles or objects from a door in order to conserve space

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while still enjoying the benefits of the article. For example, people may desire to hang a painting, picture or some other framed article from a door. Depending on the person's needs and the space that the person has available, a person may desire to hang an object that may otherwise be hung or attached to a wall from a door instead.

Typical hangers that enable a user to hang a mirror or other article from a door require a user to assemble the hanger onto the rear of the mirror or other article by screwing, gluing or otherwise attaching the hanger directly onto the rear of the mirror or other article. This type of an installation requires a screw driver or glue, which a user or consumer does not always have available. Furthermore, in the case of a screw-type assembly, even if the user has a screwdriver, the user may find it difficult to force the screw into the rear of the mirror or other article because the mirror or other article typically does not have pilot or pre-drilled holes.

Thus, a need exists for an apparatus and/or system that can be used to hang a mirror or other item from a door without the need for a screw driver or any other tools. A need also exists for an apparatus and/or system that provides added functionality to a mirror or other item that is hanging from a door or other surface.

**SUMMARY OF THE INVENTION**

The present invention may be directed to an over-the-door hanging apparatus. In one aspect, the apparatus include a mirror apparatus having a rear surface, first and second mounting elements located on the rear surface of the mirror apparatus opposite sides of the vertical centerline; a first elongate member having a first bracket for engaging a top edge of a door, a first hook, and a second hook, and a second elongate member having a second bracket for engaging the top edge of the door, a first hook, and a second hook. The mirror apparatus may be mounted to the first elongate member through slidable mating between the first mounting element and one of the first and second hooks of the first elongate member slidable mating between the second mounting element and one of the first and second hooks of the second elongate member.

In one aspect, the invention may be an over-the-door hanging apparatus comprising: a mirror apparatus comprising a rear surface and a vertical centerline; a first mounting element located on the rear surface of the mirror apparatus on a first side of the vertical centerline; a second mounting element located on the rear surface of the mirror apparatus on a second side of the vertical centerline; a first elongate member comprising a first bracket for engaging a top edge of a door, a first hook, and a second hook; a second elongate member comprising a second bracket for engaging the top edge of the door, a first hook, and a second hook; the mirror apparatus slidably mounted to the first elongate member through slidable mating between the first mounting element on the rear surface of the mirror apparatus and one of the first and second hooks of the first elongate member; and the mirror apparatus slidably mounted to the second elongate member through slidable mating between the second mounting element on the rear surface of the mirror apparatus and one of the first and second hooks of the second elongate member.

In another aspect, the invention may be an over-the-door hanging apparatus comprising: a mirror apparatus comprising a rear surface; a first mounting element and a second mounting element located on the rear surface of the mirror apparatus on opposite sides of a vertical centerline of the

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mirror apparatus; a first elongate member comprising a first bracket for engaging a top edge of a door, a first hook, and a second hook; a second elongate member comprising a second bracket for engaging the top edge of the door, a first hook, and a second hook; and wherein the mirror apparatus is alterable between: (1) being slidably mounted to the first and second elongate members at a first height by slidably mating between the first hook of the first elongate member and the first mounting element and slidably mating between the first hook of the second elongate member and the second mounting element; and (2) being slidably mounted to the first and second elongate members at a second height by slidably mating between the second hook of the first elongate member and the first mounting element and slidably mating between the second hook of the second elongate member and the second mounting element.

In yet another aspect, the invention may be a method of hanging a mirror apparatus from a door, the method comprising: slidably attaching a first elongate member to a support structure so that a first hook of the first elongate member slidably mates with a first mounting element on the support structure; slidably attaching a second elongate member to the support structure so that a first hook of the second elongate member slidably mates with a second mounting element on the support structure; lowering the first and second elongate members so that a first bracket of the first elongate member and a second bracket of the second elongate member slide over and engage a top edge of a door; and adjusting a hanging height of the support structure by: disengaging the first hook of the first elongate member from the first mounting element on the support structure and disengaging the first hook of the second elongate member from the second mounting element on the support structure; slidably mating a second hook of the first elongate member with the first mounting element on the support structure; and slidably mating a second hook of the second elongate member with the second mounting element on the support structure.

Further areas of applicability of the present invention will become apparent from the detailed description provided hereinafter. It should be understood that the detailed description and specific examples, while indicating the preferred embodiment of the invention, are intended for purposes of illustration only and are not intended to limit the scope of the invention.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will become more fully understood from the detailed description and the accompanying drawings, wherein:

FIG. 1 is a perspective rear view of an over-the-door hanging apparatus in accordance with an embodiment of the present invention.

FIG. 2 is a close-up view of a top portion of the over-the-door hanging apparatus of FIG. 1.

FIG. 3A is a side view of an elongate member of the over-the-door hanging apparatus of FIG. 1.

FIG. 3B is a perspective view of the elongate member of FIG. 3A.

FIG. 4A is a perspective view of a mounting plate of the over-the-door hanging apparatus of FIG. 1.

FIG. 4B is a front view of the mounting plate of FIG. 4A.

FIG. 5 is an exploded perspective view of a portion of the over-the-door hanging apparatus of FIG. 1.

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FIG. 6 is a cross-sectional schematic of the over-the-door hanging apparatus of FIG. 1 illustrating the connection between the elongate member and the mounting plate.

FIG. 7 is a perspective rear view of an over-the-door hanging apparatus in accordance with a second embodiment of the present invention.

FIG. 8 is an exploded perspective view of a portion of the over-the-door hanging apparatus of FIG. 7.

FIG. 9 is an exploded view of the portion of the over-the-door hanging apparatus of FIG. 7 in accordance with an alternative embodiment.

FIG. 10 is a rear view of an over-the-door hanging apparatus in accordance with a third embodiment of the present invention.

FIG. 11 is a perspective view of the over-the-door hanging apparatus of FIG. 1 hanging from a top edge of a door.

FIG. 12 is a perspective rear view of an over-the-door hanging apparatus in accordance with a fourth embodiment of the present invention.

FIG. 13 is a close-up view of a top portion of the over-the-door hanging apparatus of FIG. 12.

FIG. 14A is a side view of an elongate member of the over-the-door hanging apparatus of FIG. 12.

FIG. 14B is a perspective view of the elongate member of FIG. 14A.

FIG. 15A is a perspective view of a mounting plate of the over-the-door hanging apparatus of FIG. 12.

FIG. 15B is a front view of the mounting plate of FIG. 15A.

FIG. 16 is an exploded view of a portion of the over-the-door hanging apparatus of FIG. 12.

FIG. 17A is a cross-sectional schematic of the over-the-door hanging apparatus of FIG. 12 showing the connection between the elongate member and the mounting plate.

FIG. 17B is a cross-sectional schematic of the over-the-door hanging apparatus of FIG. 12 showing the connection between the mounting plate and a door with the elongate member omitted in accordance with an alternative embodiment.

FIG. 18A is a side view of an elongate member of the over-the-door hanging apparatus of FIG. 12 in accordance with an alternative embodiment.

FIG. 18B is a rear perspective view of the elongate member of FIG. 18A.

FIG. 19A is a perspective view of a mounting plate of the over-the-door hanging apparatus of FIG. 12 in accordance with an alternative embodiment.

FIG. 19B is a front view of the mounting plate of FIG. 19A.

FIG. 20 is a cross-sectional schematic of the over-the-door hanging apparatus of FIG. 12 showing the connection between the elongate member of FIG. 18A and the mounting plate of FIG. 19A.

FIG. 21A is a perspective view of a portion of an over-the-door hanging apparatus in accordance with a fifth embodiment of the present invention with an elongate member and a mounting element in a detached state.

FIG. 21B is a perspective view of the portion of the over-the-door hanging apparatus of FIG. 21A with the elongate member and the mounting element in an attached state.

FIG. 22A is a perspective view of a portion of an over-the-door hanging apparatus in accordance with a sixth embodiment of the present invention with an elongate member and a mounting element in a detached state.

FIG. 22B is a side view of the elongate member of FIG. 22A.

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FIG. 22C is a perspective view of the portion of the over-the-door hanging apparatus of FIG. 22A with the elongate member and the mounting element in an attached state.

FIG. 23A is a plan view of a portion of an over-the-door hanging apparatus in accordance with a seventh embodiment of the present invention with an elongate member and a mounting element in a detached state.

FIG. 23B is a side view of the elongate member of FIG. 23A.

FIGS. 23C and 23D are plan views of the portion of the over-the-door hanging apparatus of FIG. 22A illustrating the manner of coupling the elongate member to the mounting element.

FIG. 24A is a plan view of a portion of an over-the-door hanging apparatus in accordance with an eighth embodiment of the present invention with an elongate member and a mounting element in a detached state.

FIGS. 24B and 24C are plan views of the portion of the over-the-door hanging apparatus of FIG. 24A illustrating the manner of coupling the elongate member to the mounting element.

FIG. 25A is a perspective view of a portion of an over-the-door hanging apparatus in accordance with a ninth embodiment of the present invention with an elongate member and a mounting element in a detached state.

FIG. 25B is a perspective view of the portion of the over-the-door hanging apparatus of FIG. 25A with the elongate member and the mounting element in the attached state.

FIG. 25C is a perspective view of the portion of the over-the-door hanging apparatus of FIG. 25B illustrating an alternative embodiment of the mounting element.

FIG. 25D is a perspective view of the portion of the over-the-door hanging apparatus of FIG. 25A illustrating still another alternative embodiment of the mounting element with the elongate member and the mounting element in a detached state.

FIG. 25E is a perspective view of the over-the-door hanging apparatus of FIG. 25D with the mounting element and the elongate member in an attached state.

FIG. 26 is a perspective view of an over-the-door hanging apparatus in accordance with a tenth embodiment of the present invention with one elongate member in an attached state and another elongate member in a detached state.

FIG. 27 is a front perspective view of a bracket member in accordance with an embodiment of the present invention.

FIG. 28 is a rear perspective view of the bracket member of FIG. 27.

FIG. 29 is a side view of the bracket member of FIG. 27.

FIG. 30A is a front perspective view of the bracket member of FIG. 27 supporting first and second support structures.

FIG. 30B is a rear perspective view of the bracket member of FIG. 27 supporting the first and second support structures.

FIG. 31 is a side view of the bracket member of FIG. 27 supporting the first and second support structures.

FIG. 32A is a front view of the bracket member of FIG. 27 mounted to a door and supporting the first support structure at a first hanging height.

FIG. 32B is a front view of the bracket member of FIG. 27 mounted to a door and supporting the first support structure at a second hanging height.

FIG. 32C is a rear view of the bracket member of FIG. 27 mounted to a door and supporting the second support structure at a first hanging height.

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FIG. 32D is a rear view of the bracket member of FIG. 27 mounted to a door and supporting the second support structure at a second hanging height.

FIG. 33 is a rear view of the bracket member of FIG. 27 supporting an accessory and the second support structures in accordance with an alternative embodiment.

FIG. 34 is a side view of the bracket member of FIG. 33 mounted to a door and supporting the accessory and the second support structure.

FIG. 35A is a front view of the bracket member of FIG. 33 mounted to a door and supporting the accessory at a first hanging height.

FIG. 35B is a front view of the bracket member of FIG. 33 mounted to a door and supporting the accessory at a second hanging height.

FIG. 36A is a front perspective view of a bracket assembly in accordance with an embodiment of the present invention.

FIG. 36B is a front perspective view of a bracket assembly in accordance with another embodiment of the present invention.

FIG. 37A is an exploded perspective view illustrating the bracket assembly of FIG. 36A prepared for coupling to a support structure.

FIG. 37B is a perspective view illustrating an over-the-door hanging apparatus including the bracket assembly of FIG. 36A coupled to the support structure.

FIG. 37C is a front view illustrating the over-the-door hanging apparatus of FIG. 37B hanging from a door.

FIG. 38A is a front view illustrating a first alternative over-the-door hanging apparatus hanging from a door.

FIG. 38B is a front view illustrating a second alternative over-the-door hanging apparatus hanging from a door.

FIG. 38C is a front view illustrating a third alternative over-the-door hanging apparatus hanging from a door.

FIG. 39A is a perspective view of an accessory hook in accordance with an embodiment of the present invention.

FIG. 39B is a rear perspective view of the accessory hook of FIG. 39A.

FIG. 40A is a partially exploded perspective view illustrating the accessory hook of FIG. 39A prepared for coupling to a support structure.

FIG. 40B is a perspective view illustrating the accessory hook of FIG. 39A coupled to the support structure.

FIG. 41A is a partially exploded perspective view illustrating an alternative accessory hook prepared for coupling to the support structure.

FIG. 41B is a perspective view illustrating the alternative accessory hook of FIG. 41A coupled to the support structure.

FIG. 42 is a front view of an over-the-door hanging apparatus hanging from a door and having one or more of the accessory hooks of FIGS. 40A and/or 41A coupled thereto.

FIG. 43A is an exploded perspective view illustrating a support structure and first and second straps prepared for coupling to the support structure.

FIG. 43B is a perspective view illustrating the first and second straps coupled to the support structure.

FIG. 43C is a front view illustrating an over-the-door hanging apparatus hanging from the door by the first and second straps of FIGS. 43A and 43B.

FIG. 44 is a front view illustrating an alternative over-the-door hanging apparatus hanging from the door by straps.

FIG. 45 is a perspective view of a bracket assembly in accordance with an embodiment of the present invention.

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FIG. 46A is an exploded perspective view illustrating the bracket assembly of FIG. 45 in preparation for being coupled to a support structure.

FIG. 46B is a perspective view of an over-the-door hanging apparatus that includes the bracket assembly of FIG. 45 coupled to the support structure.

FIG. 46C is a front view of the over-the-door hanging apparatus of FIG. 46B hanging from a door.

FIG. 47 is a perspective view of a portion of a bracket assembly in accordance with an embodiment of the present invention.

FIG. 47A is a close-up view of area XLVIA of FIG. 47.

FIG. 47B is a side view of the close-up shown in FIG. 47A.

FIG. 48 is a perspective view of a portion of a bracket assembly in accordance with another embodiment of the present invention.

FIG. 49A is a perspective view of a support structure in accordance with an embodiment of the present invention.

FIG. 49B is an exploded side view illustrating the manner in which a bracket assembly is coupled to the support structure of FIG. 49A.

FIG. 49C is a side view illustrating the bracket assembly coupled to the support structure of FIGS. 49A and 49B.

FIG. 50 is a perspective view of a support structure in accordance with another embodiment of the present invention.

FIG. 51 is a perspective view of a support structure in accordance with yet another embodiment of the present invention.

FIG. 52 is a perspective view of an over-the-door hanging apparatus in accordance with another embodiment of the present invention.

FIG. 53 is a front view of an accessory unit including a mesh portion and a plurality of hooks in accordance with an embodiment of the present invention.

FIG. 54 is a perspective view of an accessory unit including a plurality of hooks in accordance with another embodiment of the present invention.

FIG. 55 is a front view of several accessory units of the over-the-door apparatus of FIG. 52;

FIG. 56 illustrates a manner in which a bracket assembly and the accessory units may be coupled to a support structure of the over-the-door hanging apparatus of FIG. 52.

FIG. 57 is a front view of the over-the-door hanging apparatus of FIG. 52.

FIG. 58 is a front view illustrating the over-the-door hanging apparatus of FIG. 52 hanging from a door and holding articles on its accessory units.

FIG. 59A is a front perspective view of an over-the-door hanging apparatus in accordance with an embodiment of the present invention.

FIG. 59B is a rear perspective view of the over-the-door hanging apparatus of FIG. 59A.

FIG. 60 is a rear elevation view of the over-the-door hanging apparatus of FIG. 59A.

FIG. 61 is a close-up view of area LXI of FIG. 59B.

FIG. 62 is a close-up view of area LXII of FIG. 59B.

FIG. 63 is a cross-sectional view taken along line LXIII-LXIII in FIG. 60.

FIG. 64 is a detail view of area LXIV of FIG. 63.

FIG. 65 is a perspective view of a portion of the rear of the over-the-door hanging apparatus of FIG. 59A.

FIG. 66 is a perspective cut-away view of a portion of the rear of the over-the-door hanging apparatus of FIG. 59A.

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FIG. 67 is a partial rear view of an over-the-door hanging apparatus in accordance with still another embodiment of the present invention.

FIG. 68 is a perspective view of a mounting plate of the over-the-door hanging apparatus of FIG. 67.

#### DETAILED DESCRIPTION OF THE INVENTION

The following description of the preferred embodiment(s) is merely exemplary in nature and is in no way intended to limit the invention, its application, or uses.

The description of illustrative embodiments according to principles of the present invention is intended to be read in connection with the accompanying drawings, which are to be considered part of the entire written description. In the description of embodiments of the invention disclosed herein, any reference to direction or orientation is merely intended for convenience of description and is not intended in any way to limit the scope of the present invention. Relative terms such as "lower," "upper," "horizontal," "vertical," "above," "below," "up," "down," "top" and "bottom" as well as derivatives thereof (e.g., "horizontally," "downwardly," "upwardly," etc.) should be construed to refer to the orientation as then described or as shown in the drawing under discussion. These relative terms are for convenience of description only and do not require that the apparatus be constructed or operated in a particular orientation unless explicitly indicated as such. Terms such as "attached," "affixed," "connected," "coupled," "interconnected," and similar refer to a relationship wherein structures are secured or attached to one another either directly or indirectly through intervening structures, as well as both movable or rigid attachments or relationships, unless expressly described otherwise. Moreover, the features and benefits of the invention are illustrated by reference to the exemplified embodiments. Accordingly, the invention expressly should not be limited to such exemplary embodiments illustrating some possible non-limiting combination of features that may exist alone or in other combinations of features; the scope of the invention being defined by the claims appended hereto. Where there is a conflict in the language used throughout the specification, the definition and use of the terminology in the section of the specification describing embodiments that are relevant to the particular claims at issue controls.

Referring to FIGS. 1-2 concurrently, a first embodiment of an over-the-door hanging apparatus 100 is illustrated. The over-the-door hanging apparatus 100 generally comprises a frame 101, a flat article 110 supported within the frame 100, first and second mounting plates 120, 220 secured to a rear surface 103 of the frame 101, and a bracket assembly 150 to which the frame 101 is slidably mounted (as discussed in greater detail below).

In the exemplified embodiment of FIGS. 1 and 2, the frame 101 is a perimeter-type frame comprising an outer edge 112 and an inner edge 113. The inner edge 113 forms a closed-geometry thereby defining a central opening 114. A flat article 110, such as a mirror, is positioned and supported within the central opening 114 according to known mounting techniques. Although the invention will be described with reference to the flat article 110 being a mirror, any other substantially flat article (or article with a substantially flat rear surface) can be used in conjunction with the present invention, including artwork, diplomas, or the like. Furthermore, as used herein, the term "frame" is not limited to a traditional perimeter-type frame having a central opening, but includes frames resembling a simple backer-board or

plate that takes up the entire (or a portion of) rear surface area of the article to be mounted thereon. Preferably, however, the desired flat article is displayed by frame 101 so as to be visible to a user when the over-the-door hanging apparatus 100 is hung from a door as described below.

The over-the-door hanging apparatus 100 comprises a first mounting plate 120 and a second mounting plate 220 that are secured to the rear surface 103 of the frame 101 on opposite lateral sides of a vertical centerline A-A. The first and second mounting plates 120, 220 are secured to the frame 101 via screws 121, 221, respectively. Of course, other fasteners and fastening techniques can be used to secure the first and second mounting plates 120, 220 to the frame, including without limitation bolts, nails, rivets, clamps, ties, slot-and-groove mating connections, snap-fit connections, and/or combinations thereof.

The over-the-door hanging apparatus 100 also comprises a bracket assembly 150 to which the frame 101 is detachably mounted. More specifically, the frame 101 is detachably mounted to the bracket assembly through a slidable mating between the first and second mounting plates 120, 220 and the hooks of the bracket assembly 150, which will be described in great detail below. The frame 101 comprises a first channel 130 and a second channel 230 (fully visible in FIG. 5). Only a bottom portion of the first and second channels 130, 230 is visible in FIGS. 1 and 2.

In the exemplified embodiment, the over-the-door hanging apparatus 100 comprises a perimeter-style frame 101, two mounting plates 120, 220 and a bracket assembly 150 that includes a first elongate bracket member 151 and a second elongate bracket member 251. In this embodiment, the two mounting plates 120, 220 are attached to the frame 101 on opposite sides of the vertical centerline A-A of the frame 101 while the first elongate member 151 is slidably attached to the first mounting plate 120 and the second elongate member 251 is slidably attached to the second mounting plate 220. Of course, the invention is not so limited and the over-the-door hanging apparatus 100 may comprise only one mounting plate and one elongate bracket member connected to a central region of the frame 101. Alternatively, the over-the-door hanging apparatus 100 may comprise greater than two mounting plates and a corresponding number of elongate members of the bracket assembly to provide for a more secure connection between the bracket assembly 150 and the frame 101. Moreover, while the first and second elongate bracket members 151, 251 are exemplified as separate structures, it is possible for these members 151, 251 to be formed as a single construct.

For purposes of referencing direction and orientation of the various components of the over-the-door hanging apparatus 100, it should be noted that relative terms such as top, bottom, left, right, lateral, proximal, distal, upward, outward, inward, vertical, horizontal, and the like are used to delineate relative positions of the components of the inventive over-the-door hanging apparatus 100 with respect to one another and with respect to the vertical centerline A-A and are not intended to be in any further way limiting of the present invention.

Referring now to FIGS. 2, 3a and 3b concurrently, a detailed description of the bracket assembly 150 will be set forth. The structural details of the elongate bracket members 151, 252 will be discussed herein with respect to the first elongate member 151 with the understanding that the same is applicable to the second elongate member 251 in all respects.

The first elongate member 151 extends from a distal end 152 to a proximal end 153 and comprises a front surface 193

and an opposite rear surface 194. The first elongate member 151 is preferably an integrally formed structure formed by appropriately bending a flat strip of flexible metal (sheet metal) which may be formed from steel or the like. Of course, other materials and formation techniques can be used, including the molding, milling and/or lathing of plastics, matrix materials, or any other material capable of withstanding the required load-bearing requirements. Moreover, while the first elongate member 151 of the bracket assembly 150 is preferably flexible in nature, it may be constructed so as to be substantially rigid if desired.

A generally U-shaped bracket 158 is provided at a proximal end 153 of the first elongate member 151 and extends from the rear surface 194 thereof for sliding over and engaging a top edge of a door. The U-shaped bracket 158 comprises a front portion 154, a top portion 155 and a back portion 156 that terminates with an angled flange 157. The front portion 154 corresponds to a top portion of the elongate member 151 and it encompasses the proximal end 153 of the elongate member 151. The top portion 155 extends outward from the rear surface 194 of the elongate member 151 at the proximal end 153 so as to form an approximately 90 degree angle with the front portion 154 of the U-shaped bracket 158. Although the top portion 155 is described as extending at an approximately 90 degree angle from the front portion 154 of the U-shaped bracket 158, it may extend at other angles if desired. The back portion 156 of the U-shaped bracket 158 extends downwardly from the top portion 155 at an approximately 90 degree angle with the top portion 155, thereby forming the U-shaped bracket 158 of the first elongate member 151 of the bracket assembly 150. The angled flange 157 diverges slightly outward from the back portion 156 at an obtuse angle  $\Theta$  in order to facilitate placement of the U-shaped bracket 158 over a top edge of a door as will be described below with reference to FIG. 8.

The U-shaped bracket 158 is preferably made of a flexible material so that it can bend and more easily fit over doors with varying widths. In other words, it is preferable that a user is able to extend the distance between the back portion 156 and the front portion 154 of the U-shaped bracket 158 by applying an outward force on the flange 157. The top portion 155 of the U-shaped bracket 158 is made wide enough to accommodate a conventional door width which the inventive bracket assembly 150 is to be used. The thickness of the material, and hence its flexibility, must be chosen so that the U-shaped bracket 158 is sufficiently rigid to avoid deformation under the load of the flat article 110 and yet is thin enough to fit over the top of the door without creating clearance problems with respect to the cap of the door frame. In use, a user may grip and pull on the flange portion 157 of the U-shaped bracket 158 of the bracket assembly 150 in order to assist with the attachment of the bracket assembly 150 to the top edge of a door as will be described in detail below with reference to FIG. 11.

The first elongate member 151 further comprises a top hook 161 and a bottom hook 162 near the distal end 152 of the elongate member 151. The top hook 161 and the bottom hook 162 collectively form a pair of hooks and are often referred to as such throughout this application. In the exemplified embodiment, the top and bottom hooks 161, 162 are integrally formed with the first member 151. More specifically, the top and bottom hooks 161, 162 are preferably formed by punching an appropriate pattern in the first elongate member 151 and subsequently bending the in-plane tab out of plane and into the desired shape. As a result, apertures 163, 164 (i.e. holes) are formed in the elongate member 151 behind the hooks 161, 162. The apertures 163,

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164 enable the elongate member 151 to be manufactured with less material and also prevent the elongate member 151 from prematurely deteriorating due to the friction of the mounting plates 120, 220 against the hooks 161, 162. Of course, the apertures 163, 164 need not be included as a part of the elongate member 151 and the hooks 161, 162 can be separate structures that are subsequently welded, fastened, clamped or otherwise connected to the first elongate member 151.

The top and bottom hooks 161, 162 each extend outwardly from the front surface 193 of the elongate member 151 and upwardly toward the proximal end 153. The top hook 161 extends from a base 166 at which it connects to the elongate member 151 to a distal end 192 at which it terminates. Similarly, the bottom hook 162 extends from a base 165 at which it connects to the elongate member 151 to a distal end 191 at which it terminates. The top and bottom hooks 161, 162 are preferably in a linear vertical alignment with one another on the front surface 193 of the elongate member 151. The hooks 161, 162 each have a length which is equal to the distance from the bases 165, 166 to the distal ends 191, 192 of the hooks 161, 162, respectively. The base 166 of the top hook 161 is spaced a distance D1 from the base 165 of the bottom hook 162, the importance of which will become apparent from the description below with reference to FIGS. 4a and 4b.

The top and bottom hooks 161, 162 are preferably S-shaped tabs. The S-shape of the top and bottom hooks 161, 162 are preferred in order to accomplish an efficient attachment between the bracket assembly 150 and the mounting plates 120, 220 as will be described below. The invention, of course, is not limited by the shape of the hooks and other shapes may be used as would be known to persons skilled in the art. For example, the top and bottom hooks 161, 162 could simply be straight tabs extending outwardly in an angled fashion from the bracket assembly 150 for slidable mating with the edges of the mounting plates as described below. Furthermore, it should be understood that the term hooks is intended to include any tab-type structure that may extend outwardly from the bracket assembly 150 in a manner that affords slidable mating with the edges of the mounting plates 120, 220 and is not intended to be in any other way limiting of the present invention.

Both of the top and bottom hooks 161, 162 extend outwardly and upwardly from the front surface 193 of the elongate member 151 in a spaced part manner so that slots 168, 169 are formed between the hooks 161, 162 and the front surface 193 of the elongate member 151. Both of the slots 168, 169 have an open top end 167, 197 that provides access into the slots 168, 169 so that the edges of the mounting plates can be lowered into the slots 168, 169 during mounting of the frame 101 to the bracket assembly 150, which will be described in greater detail below with reference to FIG. 6.

Referring now to FIGS. 4a and 4b, the details of the mounting plates 120, 220 of the present invention will be described. Similar to the description of the elongate members 151, 251 above, only the first mounting plate 120 will be described in detail with the understanding that the discussion is applicable to the second mounting plate 220.

The first mounting plate 120 is preferably a flat plate that can be secured to the frame 101 by any of the techniques described above. The first mounting plate 120 comprises a plurality of screw holes 122 that are sized and configured to receive a screw to facilitate the attachment of the first mounting plate 120 to the frame 101. Although the first mounting plate 120 is illustrated having three screw holes

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122, the invention is not so limited and the first mounting plate 120 may have more or less than three screw holes 122 as desired. When attached to the frame 101, a rear surface (not shown) of the first mounting plate 120 is in surface contact with the rear surface 103 of the frame 101 by nature of their opposing flat surfaces.

The first mounting plate 120 is preferably a flat plate that is substantially free of contour for the entirety of its major planar surfaces. The first mounting plate 120 has an overall perimeter shape such that its cross-sectional area changes throughout its length. The first mounting plate 120 has a bottom edge 125, a top edge 126 and two vertical sides that collectively form the perimeter of the first mounting plate 120. The first mounting plate 120 also comprises a vertical axis B-B that is substantially transverse to and intersects the bottom and top edges 125, 126 of the first mounting plate 120. A top section 127 of the first mounting plate 120 extends from the top edge 126 of the first mounting plate 120 to a transition point TP1. A middle section 128 of the first mounting plate 120 extends from the transition point TP1 to a transition point TP2. A bottom section 129 of the first mounting plate 120 extends from the transition point TP2 to the bottom end 125 of the first mounting plate 120. The cross-sectional area of the top section 127 of the first mounting plate 120 gradually decreases from a point 141 in the top section 127 to the transition point TP1. The middle section 128 of the first mounting plate 120, which extends from the transition point TP1 to the transition point TP2, has a constant cross-sectional area throughout its length. The cross-sectional area of the bottom section 129 of the first mounting plate 120 gradually increases from the transition point TP2 to a point 142. The cross-sectional area of the first mounting plate 120 is again constant from the point 142 of the bottom section 129 of the first mounting plate 120 to the bottom edge 125 of the first mounting plate 120. The shape of the first mounting plate 120 provides the first mounting plate 120 with a structural rigidity while using a minimized amount of materials in order to reduce the costs in manufacturing.

In the illustrated embodiment, the first mounting plate 120 comprises a top aperture 123 and a bottom aperture 124. The top aperture 123 is positioned partially within both of the top and middle sections 127, 128 while the bottom aperture 124 is positioned within the bottom section 129 only. Although the invention is described with a plate having two apertures, the first mounting plate 120 may have only one aperture or more than two apertures as would be understood by a person skilled in the art. Furthermore, the apertures 123, 124 may be positioned on other locations on the first mounting plate 120 as desired. Using more apertures will enable additional adjustability to the hanging height of the article as will be described below. The apertures 123, 124 in the first mounting plate 120 are preferably rectangular in shape, but may take on any other shape as desired.

The top aperture 123 is defined by a closed-geometry edge that includes a top edge 145 and a bottom edge 143. Similarly, the bottom aperture 124 is defined by a closed-geometry edge that includes a top edge 146 and a bottom edge 144. The top edge 145 of the top aperture 123 is spaced a distance D2 from the top edge 146 of the bottom aperture 124, measured along the linear axis B-B. Similarly, the top edge 146 of the bottom aperture 124 is spaced a distance D3 from the bottom edge 125, measured along the axis B-B. The first mounting plate 120 is designed so that the distance D2 is substantially equal to the distance D3. Furthermore, both of these distances D2, D3 are also substantially equal to the distance D1 between the hooks 161, 162 (discussed above

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with respect to FIGS. 3a, 3b). The importance of the edges 145, 146, 125, and the distances D1, D2, D3 will become apparent from the description below with reference to FIG. 5.

Referring now to FIG. 5, a portion of the over-the-door hanging apparatus 100 is illustrated in an exploded state. As can be seen, the frame 101 comprises has a first channel 130 formed into the rear surface 103 on one side of the vertical centerline A-A of the frame 101 along the right lateral (another one of the channels is provided on the opposite side of the vertical centerline A-A). In the exemplified embodiment of FIG. 5, the channel 130 is illustrated as a segmented channel 130 comprising a first channel segment 131, a second channel segment 132 and a third channel segment 133.

As noted above, FIG. 5 illustrates the channel 130 as comprising a first channel segment 131, a second channel segment 132 and a third channel segment 133. However, more than three channel segments may be used as desired for further adjustability in the hanging height of the over-the-door hanging apparatus 100 as will be described below. Furthermore, the frame 101 may be configured with less than three channel segments and still be used as described below as would be understood by a person skilled in the art.

Each of the channel segments 131-133 of the channel 130 is a rectangular shaped depression formed into the frame 101. The channel segments 131-133 of the channel 130 each form a groove or trough within the rear surface 103 of the frame 101 that comprises a floor and, thus, do not extend through the entire thickness of the frame 101. However, in alternative embodiments, one or more of the channel segments 131-133 of the channel 130 may be through-holes in the sense that they could extend all the way through the thickness of the frame 101. Of course, the channel segments 131-133 are contemplated as taking on any other shapes, including without limitation circles, triangles, trapezoids or the like.

Furthermore, while the channel 130 is exemplified as a segmented channel, the invention is not so limited and the channel 130 may be a singular continuous annular channel that extends around the entire perimeter of the rear surface 103 of the frame 101 or can be a continuous channel that extends from below the bottom edge 125 of the first mounting plate 120 to above the top edge 145 of the top aperture 123 of the first mounting plate 120. These alternative embodiments are shown in FIGS. 7-9 and will be described in greater detail below.

Referring to FIGS. 5 and 6 concurrently, the placement and attachment of the first mounting plate 120 to the rear surface 103 of the frame 101 will be described. In FIGS. 5 and 6, only the first mounting plate 120 is shown for clarity and ease of understanding. However, it is to be understood that the second mounting plate 220 is attached to the rear surface 103 of the frame 101 in the same manner as the first mounting plate 120, except that the second mounting plate 220 is attached to the opposite side of the vertical centerline A-A of the frame 101 (FIG. 2) in cooperation with a second channel.

The first mounting plate 120 is secured to the rear surface 103 of the frame 101 so that the vertical axis B-B of the first mounting plate 120 is coextensive with the elongated channel 130, which in the exemplified embodiment is substantially parallel with the vertical centerline A-A. The second mounting plate 220 is secured to the rear surface 103 of the frame 101 on the opposite side of a vertical centerline A-A of the frame 101 in an identical orientation with respect to the second channel 230.

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More specifically, the first mounting plate 120 is secured to the frame 101 so that: (1) the first channel segment 131 extends from a position below the bottom edge 125 of the first mounting plate 120 to a position above the bottom edge 125 of the first mounting plate 120; (2) the second channel segment 132 extends from a position below the top edge 146 of the bottom aperture 124 of the first mounting plate 120 to a position above the top edge 146 of the bottom aperture 124 of the first mounting plate 120; and (3) the third channel segment 133 extends from a position below the top edge 145 of the top aperture 123 of the first mounting plate 120 to a position above the top edge 145 of the top aperture 124 of the first mounting plate 120. While not required, it may be preferred that the first mounting plate 120 be secured to the frame 101 so that further: (1) the bottom edge 144 of the bottom aperture 124 is aligned with the top edge 146 of the bottom aperture 124 of the first mounting plate 120; and (2) the bottom edge 143 of the top aperture 123 of the first mounting plate 120 is aligned with the top edge 145 of the top aperture 123 of the first mounting plate 120.

When the first mounting plate 120 is secured to the frame 101 in the manner described above, the top aperture 123 is aligned with the first channel segment 133 and forms a passageway through the first mounting plate 120 into the third channel segment 133. Similarly, the bottom aperture 124 is aligned with the second channel segment 132 and forms a passageway through the first mounting plate 120 into the second channel segment 132. Moreover, the top edge 145 of the top aperture 123 extends transversely across the third channel segment 133. The top edge 146 of the bottom aperture 124 extends transversely across the second channel segment 132. The bottom edge 125 of the first mounting plate 120 extends transversely across the first channel segment 131.

Referring solely now to FIG. 6, the first, second and third channel segments 131-133 preferably extend above the bottom edge 125 of the first mounting plate 120, the top edge 146 of the bottom aperture 124, and the top edge 145 of the top aperture 123, respectively, by a distance that is at least equal to the length of the hooks 161, 162. This configuration provides sufficient space for the hooks 161, 162 to fit within the selected channel segments 131-133 when the frame 101 is slidably mounted to the bracket assembly 150 as will be discussed below.

Referring to FIGS. 2, 5 and 6 concurrently, the attachment of the bracket assembly 150 to the first and second mounting plates 120, 220 will be described. The description will be provided with specific reference to the mating between the first mounting plate 120 and the first elongate member 151 of the bracket assembly 150. However, it should be understood that the description is equally applicable to the mating of the second mounting plate 220 with the second elongate member 251.

After properly aligning the first mounting plate 120 as described above, the first mounting plate 120 is secured to the rear surface 103 of the frame 101 by extending the screws 121 through the screw holes 122 and threadably engaging the frame. It is preferred that the first and second mounting plates 120, 220 be preassembled (i.e., secured) to the frame 101 during manufacturing. Thus, the user will be able to hang the apparatus 100 to a door without the need for any tools or excessive physical strength. In other words, the user will purchase the product fully assembled with the exception that the bracket assembly 150 will be separate from the first and second mounting plates 120, 220 and frame 101. As such, the user will only need to slide the U-Shaped brackets of the bracket assembly 150 over the top



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edge of the door and then slide the hooks **161**, **162** of the bracket assembly into mating cooperation with either: (1) the top edges **145**, **146** of the apertures **123**, **124**; or (2) the top edge **146** and the bottom edge **125**.

By nature of having an option between sliding the hooks **161**, **162** of the bracket assembly into mating cooperation with either: (1) the top edges **145**, **146** of the apertures **123**, **124**; or (2) the top edge **146** and the bottom edge **125**, the inventive over-the-door hanging apparatus **100** has an advantageous built-in hanging height adjustability. In other words, depending upon which of the channel segments **131-133** of the frame **101** the top and bottom hooks **161**, **162** are attached to, the hanging height may be altered. A more detailed description of how the inventive over-the-door hanging apparatus **100** may be hung at a lower and/or a higher position will be set forth below. It should be understood, however, that while the description will be set forth below in relation to the first elongate member **151** mating with the first mounting plate **120** and the first channel **130**, the same principles apply to the mating between the second elongate member **151**, the second mounting plate **220**, and the second channel **230**.

When a lower hanging position is desired, such as is shown in FIG. 6, the first elongate member **151** of the bracket assembly **150** will be attached to the frame **101** by inserting the bottom hook **162** through the bottom aperture **124** in the first mounting plate **120** and the top hook **161** through the top aperture **123** in the first mounting plate **120**. Because the first mounting plate **120** is attached to the frame **101** so that the bottom aperture **124** is aligned with the second channel segment **132** and the top aperture **123** is aligned with the third channel segment **133**, the bottom hook **162** will be inserted into the second channel segment **132** of the frame **101** while the top hook **161** will be inserted into the third channel segment **133** of the frame **101**. Once sufficiently inserted through the apertures **123**, **124** and into the second and third channel segments **132**, **133** of the frame **101**, the frame **101** will be lowered (or the elongate member **151** will be raised) until the top edge **145** of the top aperture **123** of the first mounting plate **120** slides into the slot **168** of the top hook **161** and the top edge **146** of the bottom aperture **124** of the first mounting plate **120** slides into the slot **169** of the bottom hook **162**. When fully slid into the slots **168**, **169**, the base **165** of the bottom hook **162** will contact the top edge **146** of the bottom aperture **124** of the first mounting plate **120** and the base **166** of the top hook **161** will contact the top edge **145** of the top aperture **123** of the first mounting plate **120**.

As noted above, the second and third channel segments **132**, **133** extend upwardly beyond the edges **145**, **146** (in the direction of the vertical axis A-A) and beneath the first mounting plate **120**. This configuration enables the hooks **161**, **162** of the bracket assembly **150** to extend into the frame **101** so that a portion of the first mounting plate **120** is snugly disposed within each of the slots **168**, **169**.

Through this slidable mating, the hooks **161**, **162** frictionally engage the portions of the first mounting plate **120** positioned within the slots **168**, **169** to prevent the frame **101** from becoming accidentally dislodged from the bracket assembly **150**. The frictional engagement is further facilitated by the S-shape and resilient nature of the hooks **161**, **162**. Although the attachment is described as being a friction fit, the invention is not so limited and the attachment may be described as a press fit, an interference fit or any other fit as would be known to persons skilled in the art. The attachment between the bracket assembly **150** and the frame **101** will be enhanced when the U-shaped bracket **158** of the bracket

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assembly **150** is attached to a top edge of a door because the weight of the flat article **110** being hung will increase the tight nature of the fit between the hooks **161**, **162** and the combined plate/frame **120/101** apparatus.

The invention has been described with the bracket assembly **150** attached to the second and third channel segments **133**, **132** in the frame **101**. Such an attachment is used when the hanging height of the mirror or article is desired to be a lower hanging height. As noted above, the hanging height of the over-the-door hanging apparatus **100** is adjustable. Therefore, the mirror or other flat article **110** may be hung at a higher hanging height in the manner described below and as shown in FIG. 2.

When the first mounting plate **120** is secured to the frame **101**, the first channel segment **131** in the frame **101** extends beyond the bottom edge **125** of the first mounting plate **120** as illustrated in FIG. 2. Therefore, rather than attaching the bracket assembly **150** through the second and third channel segments **133**, **132** of the frame **101**, the hooks **161**, **162** of the bracket assembly **150** are attached to the second and first channel segments **132**, **131** of the frame **101**, respectively. Specifically, the bottom hook **162** will be inserted into the first channel segment **131** below the bottom edge **125** of the first mounting plate **120** while the top hook **161** will be inserted into the second channel segment **132** via the bottom aperture **124** of the first mounting.

Once sufficiently inserted into the first and second channel segments **131**, **132** of the frame **101**, the frame **101** will be lowered (or the elongate member **151** will be raised) until the top edge **146** of the bottom aperture **124** of the first mounting plate **120** slides into the slot **168** of the top hook **161** and the bottom edge **146** of the first mounting plate **120** slides into the slot **169** of the bottom hook **162**. When fully slid into the slots **168**, **169**, the base **165** of the bottom hook **162** will contact the top edge **146** of the bottom aperture **124** of the first mounting plate **120** and the base **166** of the top hook **161** will contact the bottom edge **125** of the first mounting plate **120**.

As noted above, the first and second channel segments **131**, **132** extend upwardly beyond the edges **146**, **125** (in the direction of the vertical axis A-A) and beneath the first mounting plate **120**. This configuration enables the hooks **161**, **162** of the bracket assembly **150** to extend into the frame **101** so that a portion of the first mounting plate **120** is snugly disposed within each of the slots **168**, **169**. Thus, the same frictional/interference fit is formed. With such an attachment, the apparatus **100** may be hung at a higher level on a door than previously described manner. Thus, the present invention provides an easy and efficient way for a user to adjust the hanging height of a mirror or other object without the need for tools or an excessive amount of physical force. The adjustable height mounting is achieved by designing the distances **D1**, **D2**, **D3** to be substantially equal.

Of course, the second elongate member **251** may be attached in the same manner as described above except that the second elongate member **251** is attached to the second mounting plate **220** which is secured onto the frame **101** on the opposite side of the vertical centerline A-A. By using the first and second elongate members **151**, **251**, the flat article **110** will be more securely hung from the top of the door.

Referring to FIGS. 7 and 8 concurrently, an alternative embodiment of a frame **301** to be used with an over-the-door hanging apparatus **300** will be described. The components of the over-the-door hanging apparatus **300** that are the same as the components described above with reference to the over-the-door hanging apparatus **100** will be delineated by the

same reference numerals except that the over-the-door hanging apparatus **300** will use the 300- and 400-series of numbers rather than the 100- and 200-series of numbers. Furthermore, only those aspects of the over-the-door hanging apparatus **300** that are different from the over-the-door hanging apparatus **100** described above will be described below in detail. Therefore, all features of the over-the-door hanging apparatus **300** that are not described below should be interpreted as being identical to the corresponding component from the over-the-door hanging apparatus **100** described above.

Specifically, rather than having a channel **130** comprising three distinct channel segments **131-133** in the frame **101** that require time and effort in order to properly align the first and second mounting plates **120, 220** as described above, the frame **301** may have a continuous channel **330** along all four sides of the frame **301** so as to form an annular channel about the perimeter of the frame **301**. This embodiment is advantageous in that it reduces the costs in manufacturing by reducing the amount of material needed to create the frame **301** and by reducing the time required to attach the first and second mounting plates **320, 420** to the frame **301**.

In use, the first mounting plate **320** is aligned with the channel **330** so that the channel **330** can be seen through the apertures **323, 324** in the first mounting plate **320**. This embodiment nullifies the need to align the apertures **323, 324** of the first mounting plate **320** with the channel **330** in a vertical direction and instead enables the first mounting plate **320** to be attached to the frame **301** in a myriad of positions so long as the channel **330** is visible and accessible through the apertures **323, 324**. Such an embodiment provides a significantly greater amount of flexibility to the hanging height of the flat article.

After the first mounting plate **320** (and preferably also the second mounting plate **420**) is secured to the frame, the hooks **361, 362** of the bracket assembly **350** are inserted through the apertures **323, 324** of the first mounting plate **320** in the same manner as described above. The entire attachment procedure between the bracket assembly **350** and the frame **301** is identical to the attachment procedure described above with reference to the bracket assembly **150** and the frame **101**. Essentially, the over-the-door hanging apparatus **300** is identical to the over-the-door hanging apparatus **100** except that instead of having a segmented channel **130** in the frame **101**, there is one continuous channel **330** in the frame **301** that forms a rectangular border around the entirety of the frame **301**. As can be seen the channel **330** still extends from a position below to a position above each of the edges **345, 346, 325**.

Referring to FIG. 9, another alternative embodiment of the channel in the frame will be described. This embodiment comprises a continuous channel **530** that is not segmented and that does not form a border around the frame **101**. Rather, the channel **530** only extends from a position below the bottom edge **147** of the first mounting plate **120** to a position above the top edge **145** of the top aperture **123** of the first mounting plate **120**. In such an embodiment, a second channel (not shown) which is identical to the channel **530** will be located on the opposite lateral side of the frame **101**, thereby forming a mirror image.

Referring to FIG. 10, an alternative embodiment for a mounting plate will be described. The first and second mounting plates **120, 220** may each comprise a first plate segment **621, 721**, a second plate segment **622, 722** and a third plate segment **623, 723**. This embodiment will be further described only with reference to the first mounting plate **120**. It should be understood that the second mounting

plate **220** will have features and components that are identical to the first mounting plate **120**.

In the embodiment illustrated in FIG. 10, a bottom edge **625** of the third plate segment **623** serves an identical purpose to the bottom edge **125** of the first mounting plate **120** described above. Furthermore, a bottom edge **646** of the second plate segment **622** serves an identical purpose to the top edge **146** of the bottom aperture **124** of the first mounting plate **120**. Further still, a bottom edge **645** of the first plate segment **621** serves an identical purpose to the top edge **145** of the top aperture **123** of the first mounting plate **120**. It should be understood to a person skilled in the art that the inventive over-the-door hanging apparatus **100** would operate in the same exact manner with the three plate segment **621, 622, 623** embodiment as it would with the mounting plate **120** as described above. In other words, the bracket assembly **150** will be attached to the embodiment illustrated in FIG. 10 in the same manner as was described above.

Referring to FIG. 11, the mirror **110** or other article is illustrated hanging from a top edge **171** of a door **170**. In the illustrated embodiment, the mirror or other flat article **110** is attached to the bracket assembly **150** which comprises the first elongate member **151** and the second elongate member **251** on opposite lateral sides of the rear surface (not shown) of the flat article **110**. The U-shaped brackets **158, 258** of the elongate members **151, 251** of the bracket assembly **150** are attached to the top edge **171** of the door **170** so that the flat article **110** is hung therefrom. When the flat article **110** is a mirror, it is hung so that the reflective front surface **111** is visible and the rear surface (not shown) is in surface contact with the door **170**. It should be understood that any of the various types of channels and mounting plates may be used with the inventive over-the-door hanging apparatus in many different combinations. For example, the three plate segment **621, 622, 623** mounting plate may be used with the segmented channels **131, 132, 133** or with the elongated channel **530** or with the border/annular channel **330**. Similarly, the first and second mounting plates **120, 220** may also be used with any of the above mentioned channel configurations.

In alternative embodiments of the invention, which are not illustrated, the frame **100** may not include channels **130, 230** in its rear surface **101**. In such embodiments, the first and second mounting plates **120, 220** (or the segments thereof) would be placed over planar sections of the rear surface **101** of the frame **100** and be designed so that the hooks **161-162, 191-292** could be slid/inserted between a raised portion of the mounting plates **120, 220** and the planar sections of the rear surface **101**. This could be accomplished by forming the first, second and/or third edges **125, 145, 146** to include a raised portion that protrudes from the rear surface **101** of the frame **100**, thereby forming a nesting space/gap between the rear surface **101** of the frame **100** and the rear surfaces of the mounting plates **120, 220** (or the segments thereof). For example, the mounting plates **120, 220** (or the segments thereof) could be formed in to resemble one half of a C-clamp and/or a V-clamp. In another example, a small section of the first, second and/or third edges **125, 145, 146** could be bent out of plane with the remaining sections of the mounting plates **120, 220** (or the segments thereof) that are coupled to the frame **100**. Finally, any of the foregoing details described above with respect to FIGS. 1-11 could be utilized with such an alternative embodiment.

In a still further embodiment of the invention, shown in FIGS. 12-17B, the frame **801** may be designed so that the channels **130, 230** are omitted. In such an embodiment, the bracket assembly **850** comprises a first elongate member **851**

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and a second elongate member **951** that are slidably attached to mounting plates **820**, **920** respectively. In this embodiment, the first and second mounting plates **820**, **920** are placed over planar sections of the rear surface **803** of the frame **801**. To avoid redundancy, only the first mounting plate **820**, along with its cooperation with the first elongate member **851**, is described in detail herein with the understanding that the second mounting plate **920**, and its coupling to the second elongate member **951**, is identical.

As best shown in FIGS. **15A** and **15B**, the first mounting plate **820** generally comprises a plurality of planar portions **875A-C** and a plurality of raised portions **848A-C**. The plurality of planar portions **875A-C** are substantially coplanar with one another. Similarly, the plurality of raised portions **848A-C** are substantially coplanar with one another. The plurality of raised portions **848A-C** are offset from and not coplanar with the plurality of planar portions **875A-C**. The plurality of raised portions **848A-C** and the plurality of planar portions **875A-C** are arranged in an alternating manner and are interconnect to one another.

The first mounting plate **820** is designed so that the hooks **861-863** (or flanged bosses, rivets, screws or bolts in other embodiments) of the first elongate member **851** may be slidably inserted between the raised portions **848A-C** of the first mounting plate **820** and the planar sections of the rear surface **801** of the frame **801**, respectively.

The first mounting plate **820** further comprises a first aperture **823**, a second aperture **824**, and a multi-width aperture **830** that are formed in the raised portions **848A-C** of the first mounting plate **820** respectively. The multi-width aperture **830** is divided into a nesting section **832** and a receiving section **831**. The nesting section **832** extends vertically from the receiving section **831** and is narrowed relative to the receiving section **831**. Stated simply, the nesting section **832** has a width that is less than the width of the receiving section **831**. While the multi-width aperture is exemplified as having stepped width, in other embodiments the width may simply taper such that the multi-width slot resembles a V-shape.

The multi-width aperture **830** terminates in a top edge **847**. As exemplified, the top edge **847** is curved to accommodate the shaft of a screw but can be linear in other embodiments. The receiving section **831** is sized such that it will permit the head of a screw, flanged fastener, bolt, or rivet to pass therethrough. The receiving section **831** of the multi-width aperture **830** may have a semi-circular shape or may be constructed in any shape that permits the passage of a flanged portion of fastener (such as the head of a screw or the head of a flanged fastener).

The multi-width aperture **830** has a bottom edge **834** that is located on or near the planar portion **875A** of the first mounting plate **820** to facilitate insertion of the screw head into the screw aperture **830**. The nesting section **832** is sized such that the head of the screw may not pass through the slot section **832**. This allows the multi-width aperture **830** of the first mounting plate **820** to be aligned with a protruding screw such that the screw head can be slid into the receiving section **831**. Then, upon the first mounting plate **820** being slid downward, the screw body passes into the nesting section **832** and the screw head is trapped between the raised portion **848A** of the first mounting plate **820** and the rear surface of the frame **801**, thereby facilitating mounting to a door or other vertical surface.

Each of the first aperture and second aperture **823**, **824** have a top edge **845**, **846** respectively. The top edge **845** of the first aperture **823** is located on the raised portion **848B** while the top edge **846** of the second aperture **824** is located

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on the raised portion **848C**. The first and second apertures **823**, **824** also have bottom edges **843**, **844**, respectively. The bottom edge **843** of the first aperture **823** is located on the planar portion **875B** while the bottom edge **844** of the second aperture **824** is located on the planar portion **875C**. As will be discussed below with respect to FIG. **17A**, the hooks **861-863** are slidably inserted into the apertures **823**, **824**, **830** and engage the top edges **845-847** of the first mounting plate **820**.

The first mounting plate **820** further includes a plurality of fastener holes **822** which are sized and configured to receive a screw (or other fastener) to facilitate fixed attachment of the first mounting plate **820** to the rear surface **803** of the frame **801**. Although the first mounting plate **820** is illustrated as having three fastener holes **822**, the invention is not so limited and the first mounting plate **820** may have more or less than three fastener holes **822** as desired. When attached to the frame **801**, the planar portions **875A-C** are in surface contact with the rear surface **803** of the frame **801**.

As can be best seen in FIGS. **12** and **17A**, the over-the-door apparatus **800** may be hung from a door by using the first and second elongate members **851**, **951**. The first and second elongate members **851**, **951** are slid over the top edge of the door as described above for the embodiments of FIGS. **1-10**. The first and second mounting plates **820**, **920**, which are coupled to the frame **801**, are then slidably mounted to the first and second elongate members **851**, **951**, respectively, as discussed in greater detail below.

To avoid redundancy, only the mounting of the first elongate member **851** to the first mounting plate **820** is described in detail herein with the understanding that the second elongate member **951** and the second mounting plate **920** are identical. In order to slidably mount the first elongate member **851** to the first mounting plate **820**, the hooks **861-863** are inserted through the multi-width aperture **830**, the first aperture **823**, and the second aperture **824**. The hook **861** is inserted through the multi-width aperture **830**, the hook **862** is inserted through the first aperture **823**, and the hook **863** is inserted through the second aperture **824**. The elongate member **851** is then slid upward until the hooks **861-863** fully engage the top edges **847**, **845**, **846** respectively.

Instead of inserting hooks **861-863** through apertures **830**, **823**, and **824**, the hook **861** may be inserted through the first aperture **823** and the hook **862** may be inserted through the second aperture **824**. Alternately, hook **862** may be inserted through the multi-width aperture **830** and hook **863** may be inserted through the first aperture **823**. In yet other mounting combinations, the hook **861** may be inserted through the second aperture **824**. Further, the hook **863** may be inserted through the multi-width aperture **830**. By inserting different hooks **861-863** through different apertures **830**, **823**, **824**, adjustments in height may be obtained. In alternate embodiments, there may be more than three hooks **861-863** or apertures **830**, **823**, **824** or there may be fewer than three hooks **861-863** or apertures **830**, **823**, **824**. The number of hooks **861-863** and the number of apertures **830**, **823**, **824** need not be equal. In yet other embodiments, the first and second apertures **823**, **824** may have the same shape as the multi-width aperture **830**.

In an alternate mounting best shown in FIG. **17B**, the frame **801** is hung by installing a screw **849** into a door **870**. To avoid redundancy, only the first mounting plate **820** is disclosed, with the second mounting plate **920** being identical. Instead of a door **870**, the first mounting plate **820** may be mounted to any other vertical surface, such as a wall. As with other embodiments, the first mounting plate **820** is

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installed to the frame **801** via screws **821**, and then the head of the screw **849** is inserted into the multi-width aperture **830** and slid upward until the shaft of the screw **849** contacts the top edge **847** of the multi-width aperture **830**. This permits flexible mounting of the frame **801** without requiring the use of the first and second elongate members **851**, **951**. Multiple screws **849** may be used, and the first mounting plate **820** may be designed to accommodate multiple screw apertures **830** as desired.

FIGS. **18A** and **18B** disclose an alternate embodiment of the first elongate member **851A**, with three flanged fasteners **881-883** in place of hooks **861-863**. The elongate member **851A** is identical to the embodiments disclosed in FIGS. **12-17B** excepting those features explicitly described. The second elongate member is also identical to the first elongate member **851A** disclosed in this embodiment. The flanged fasteners **881-883** each have a post portion **886** and a flange portion **888**. The flanged fasteners engage multi-width apertures **891-893** as will be discussed in further detail below.

FIGS. **19A** and **19B** disclose an alternate embodiment of the first mounting plate **820A**. The first mounting plate **820A** has three multi-width apertures **891-893**. The first mounting plate **820A** is identical to the embodiment disclosed in FIGS. **12-17B** excepting those features explicitly described. The second mounting plate is also identical to the first mounting plate **820A** disclosed in this embodiment.

Turning to FIG. **20**, the flanged fasteners **881-883** are shown engaged with the multi-width apertures **891-893**. The flanged fasteners **881-883** are inserted into the multi-width apertures **891-893** and slidably engaged such that the post portion **886** of the flanged fasteners **881-883** mates with the nesting section of the corresponding multi-width apertures **891-893**. The flange portion **888** of the flanged fasteners **881-883** prevents the flanged fasteners **881-883** from withdrawing from the multi-width apertures **891-893** unless the first mounting plate **820A** is slid upward with respect to the first elongate member **851A** to release the flanged fasteners **881-883**. Alternate embodiments of the flanged fasteners **881-883** may be bolts, rivets, screws, or other fasteners having a flange and post portion which permit engagement with the nesting portion of the multi-width apertures **891-893**.

In yet other embodiments, the hooks, flanged fasteners, bolts, rivets, or screws of the first and second elongate members as shown and described in the preceding embodiments may be substituted for the apertures of the first and second mounting plates of the preceding embodiments. Likewise, the apertures of the first and second mounting plates may be substituted for the hooks, flanged fasteners, etc. of the first and second elongate members. Thus, the mounting features may be reversed to permit the mounting plates to have hooks or flanged fasteners which engage apertures of the elongate members.

Referring now to FIGS. **21A** and **21B**, an over-the-door hanging apparatus **1000** will be described in accordance with yet another embodiment of the present invention. FIGS. **21A** and **21B** only illustrate a portion of the over-the-door hanging apparatus **1000** showing the coupling components on one side thereof, it being understood that the opposite side thereof may have identical components and an identical structure. Thus, the configuration shown, for example, in FIGS. **1** and **2** is applicable to this embodiment except that the structure of the mounting components is different in this embodiment as will be described herein below.

The over-the-door hanging apparatus **1000** comprises a support structure **1001** having a rear surface **1002**. In certain embodiments a mirror is coupled to the support structure

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**1001**. However, the invention is not to be limited to a mirror being coupled to the support structure **1001** in all embodiments and other articles may be coupled to the support structure **1001** in other embodiments as described herein above. The mirror (or other article) is not illustrated in FIGS. **21A** and **21B**, but the description above regarding the coupling of the mirror may be applicable. In certain embodiments, the support structure **1001** may have the rear surface **1002** and an opposite front surface, and the mirror may be coupled to the front surface. The mirror may be directly or indirectly coupled to the front surface. For example, in some embodiments the mirror may be coupled to a door that is hingedly coupled to the front surface of the support structure **1001** similar to conventional cabinets such as medicine cabinets or other storage cabinets with a mirrored door.

The over-the-door hanging apparatus **1000** also comprises a first elongate member **1003** and a second elongate member (not illustrated) and a first pair of mounting elements **1004** and a second pair of mounting elements (not illustrated). Specifically, the first pair of mounting elements **1004** is secured to the rear surface **1002** of the support structure **1001** on a first side of a vertical centerline of the support structure **1000** and the second pair of mounting elements (not illustrated) is secured to the rear surface **1002** of the support structure **1001** on a second side of the vertical centerline of the support structure **1000** that is opposite the first side. Because only one side of the over-the-door hanging apparatus **1000** is illustrated, only one of the elongate members and one of the pairs of mounting elements is illustrated. However, it should be appreciated that a second elongate member that is identical in structure to the first elongate member **1003** and a second pair of mounting elements that is identical in structure to the first pair of mounting elements **1004** are also included as a part of the over-the-door hanging apparatus **1000** similar to that which has been described in the previous embodiments.

The first pair of mounting elements **1004** (and also the second pair of mounting elements) is secured to the rear surface **1002** of the support structure **1001**. The details of the first pair of mounting elements **1004** described below are applicable to the second pair of mounting elements that are not illustrated in the exemplified embodiment. In the exemplified embodiment, the first pair of mounting elements **1004** comprises a first mounting element **1005** and a second mounting element **1006**. More specifically, in this embodiment the first mounting element **1005** is a first set screw that is screwed into the rear surface **1002** of the support structure **1001** and the second mounting element **1006** is a second set screw that is screwed into the rear surface **1002** of the support structure **1001**. Of course, the first and second mounting elements **1005**, **1006** may be other types of fasteners, including nails, rivets, bolts, pins, barbs, or the like (see, for example, FIG. **26** and the related description below). The first and second mounting elements **1005**, **1006** may be secured to the rear surface **1002** of the support structure **1001** and then the first elongate member **1003** secured to the first and second mounting elements **1005**, **1006** or the first elongate member **1003** may be placed adjacent/into contact with the rear surface **1002** of the support structure **1001** and then the first and second mounting elements **1005**, **1006** used to couple the first elongate member **1003** to the support structure **1001**. Thus, the first and second pairs of mounting elements **1004** may be secured to the rear surface **1002** of the support structure **1001** by the factory during manufacturing or by the user during assembly after purchase.

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The first elongate member **1003** will be described below, it being understood that the same description is applicable to the second elongate member although it is not specifically illustrated in the figures for this particular embodiment. The first elongate member **1003** extends from a distal end **1007** to a proximal end **1008** and comprises a first surface **1009** and an opposite second surface **1010**. The first elongate member **1003** comprises a plurality of mounting elements **1011** for mounting the first elongate member **1003** to the support structure **1001**, and more specifically to the first pair of mounting elements **1004**. The first elongate member **1003** also comprises a first bracket **1012** for engaging a top edge of a door as has been described above.

In the exemplified embodiment, the plurality of mounting elements **1011** comprises four separate multi-width apertures **1011a-d** formed into the first elongate member **1003** in a vertically spaced apart manner. The multi-width apertures **1011a-d** comprise a larger width portion that permits the head/flange of the first and second mounting elements **1005**, **1006** of the first pair of mounting elements **1004** to pass therethrough and a smaller width portion that prevents the head of the first and second mounting elements **1005**, **1006** of the first pair of mounting elements **1004** from passing therethrough. The smaller width portions of the multi-width apertures **1011a-d** permit the stem portions of the first and second mounting elements **1005**, **1006** of the first pair of mounting elements **1004** to pass therethrough.

Thus, referring collectively to FIGS. **21A** and **21B**, the first elongate member **1003** can be coupled to the first pair of mounting elements **1004** by inserting the heads of the first and second mounting elements **1005**, **1006** of the first pair of mounting elements **1004** (which may be set screws or other fasteners as described above) through the larger width portion of two of the multi-width apertures **1011a**, **1011b** and then sliding the first elongate member **1003** relative to the support structure **1001** so that the stem portions of the first and second mounting elements **1005**, **1006** of the first pair of mounting elements **1004** (which may be set screws or other fasteners as described above) enter into the smaller width portion of the multi-width apertures **1011a**, **1011b**. This prevents the first elongate member **1003** from being separated from the first pair of mounting elements **1004** unless the installation process including the sliding movement noted above is reversed.

Thus, the first and second elongate members **1003** are separate components from the support structure **1001**. The first and second pairs of mounting elements **1004** are coupled to the rear surface **1002** of the support structure **1001** before the first and second elongate members **1003** are mounted to the support structure **1001**. Specifically, the first and second elongate members **1003** are configured to be mounted to the support structure **1001** via engagement between the mounting elements **1011** of the first and second elongate members **1003** and the first and second pairs of mounting elements **1004**.

Referring now to FIGS. **22A-22C**, another embodiment of an over-the-door hanging apparatus **1100** will be described. The over-the-door hanging apparatus **1100** generally comprises a support structure **1101** having a rear surface **1102**, first and second elongate members **1103** (only the first elongate member is illustrated), and first and second pairs of mounting elements **1104** (only the first pair of mounting elements is illustrated). Similar to the embodiments described above, a mirror or other flat article may be coupled to the support structure **1101**. As with the previously described embodiment of FIGS. **21A-21B**, in this embodiment only one side of the apparatus **1100** and thus only one

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of the elongate members **1103** and one of the pairs of mounting elements **1104** is illustrated. However, it should be appreciated that a second elongate member and a second pair of mounting elements that are identical to the first elongate member **1103** and the first pair of mounting elements **1104** is provided on the opposite side of the over-the-door hanging apparatus **1100**. In certain embodiments, the first pair of mounting elements **1104** and the second pair of mounting elements are located on opposite sides of a vertical centerline of the support structure **1101** as described above.

The first pair of mounting elements **1104** (and also the second pair of mounting elements) is secured to the rear surface **1102** of the support structure **1101**. The details of the first pair of mounting elements **1104** described below are applicable to the second pair of mounting elements. In the exemplified embodiment, the first pair of mounting elements **1104** comprises a first mounting element **1105** and a second mounting element **1106**. The first and second mounting elements **1105**, **1106** of the first pair of mounting elements **1104** are vertically aligned and spaced apart from one another. In the exemplified embodiment, the first mounting element **1105** is a D-ring located on the rear surface **1102** of the support structure **1101** and the second mounting element **1106** is a set screw that is screwed into the rear surface **1102** of the support structure **1101**. The D-ring may be coupled to the rear surface **1102** of the support structure **1101** via a bracket or plate member **1115**. The set screw may be replaced with other fasteners such as those described above with reference to FIGS. **21A** and **21B**. In certain embodiments, the apparatus **1100** may only include the first mounting element **1105** and not also the second mounting element **1106**, and thus the second mounting element **1106** (i.e., the set screw or equivalent) may be omitted in some embodiments. Although the second pair of mounting elements is not illustrated in the drawings, in some embodiments the first mounting element **1105** of the first pair of mounting elements **1104** is horizontally aligned with the first mounting element of the second pair of mounting elements and the second mounting element **1106** of the first pair of mounting elements **1104** is horizontally aligned with the second mounting element of the second pair of mounting elements.

The first elongate member **1103** extends from a proximal end **1107** to a distal end **1108** and comprises a first surface **1109** and an opposite second surface **1110**. The first elongate member **1103** comprises a plurality of mounting elements **1111** for mounting to the support structure **1101** (and more specifically for mounting to the first pair of mounting elements **1104**) and a first bracket **1112** for engaging a top edge of a door. The first bracket **1112** is located at the distal end **1108** of the first elongate member **1103**. In the exemplified embodiment, the plurality of mounting elements **1111** extend from the first surface **1109** of the first elongate member **1103** and the first bracket **1112** extends from the second surface **1110** of the first elongate member **1103**.

In the exemplified embodiment, the plurality of mounting elements **1111** comprises a first mounting element **1111a**, a second mounting element **1111b**, a third mounting element **1111c**, a fourth mounting element **1111d**, and a fifth mounting element **1111e**. However, the number of the mounting elements **1111** is not to be limiting of the present invention in all embodiments and there may be more or less than that which is shown in the appended drawings. In the exemplified embodiment, each of the first through fourth mounting elements **1111a-d** is a protrusion or hook that extends from the first surface **1109** of the first elongate member **1103** and the fifth mounting element **1111e** is an aperture, and more

specifically a multi-width aperture, that is formed through the first elongate member **1103**.

In the exemplified embodiment, the fifth mounting element **1111e** is formed into the main portion of the first elongate member **1103**. However, in other embodiments the fifth mounting element **1111e** may be an aperture that is formed into one of the first through fourth mounting elements **1111a-d**. For example, the first elongate member **1103** may comprise the first mounting element **1111a**, but it may be elongated relative to that which is illustrated so that it extends further vertically along the first elongate member **1103**. In some embodiments, the aperture of the fifth mounting element **1111e** may be formed into the first mounting element **1111a**.

In the exemplified embodiment, the first mounting element **1111a** is located at the proximal end **1107** of the first elongate member **1103**. Furthermore, in the exemplified embodiment the fifth mounting element **1111e** is located between the first mounting element **1111a** and the proximal end **1108** of the first elongate member **1103**. In some embodiments, the plurality of mounting elements **1111** may comprise only the first mounting element **1111a** and the fifth mounting element **1111e**. It should be appreciated that the use of the terms “first,” “second,” “third,” and so on is merely intended to distinguish between the different mounting elements and is not otherwise intended to limit the scope of the application or claims. Thus, the phrase “first mounting element,” “second mounting element,” etc. in the claims may refer to any of the mounting elements **1111a-e** described herein.

Referring to FIGS. **22A** and **22C**, the coupling of the first elongate member **1103** to the support structure **1101** via the first pair of mounting elements **1104** will be described, it being understood that this same description is applicable to the coupling of the second elongate member to the support structure **1101** via the second pair of mounting elements. The first elongate member **1103** is positioned adjacent the rear surface **1102** of the support structure **1101** so that the first mounting element **1111a** of the first elongate member **1103** is aligned with the first mounting element **1105** of the first pair of mounting elements **1104** and the fifth mounting element **1111e** of the first elongate member **1103** is aligned with the second mounting element **1106** of the first pair of mounting elements **1104**. Of course, any one of the first through fourth mounting elements **1111a-d** of the first elongate member **1103** may be aligned with the first mounting element **1105** depending on the desired hanging height of the over-the-door hanging apparatus **1100**. The positioning/location of the second mounting element **1106** of the first pair of mounting elements **1104** may simply need to be changed to ensure that it is aligned with the fifth mounting element **1111e** of the first elongate member **1103** depending on which of the first through fourth mounting elements **1111a-d** of the first elongate member **1103** is to be coupled to the first mounting element **1105** of the first pair of mounting elements **1104**. In some embodiments the second through fourth mounting elements **1111b-d** may be omitted so that there is only the first mounting element **1111a** and the fifth mounting element **1111e** and no adjustability in the hanging height of the over-the-door hanging apparatus **1100**.

Once aligned as described herein, the first mounting element **1111a** of the first elongate member **1103** is engaged with the first mounting element **1105** such that the D-ring becomes positioned within a space between the first mounting element **1111a** and the first surface **1109** of the first elongate member **1103**. Simultaneously, the second mounting element **1106** enters into the larger width portion of the

second mounting element **1106** of the first elongate member **1103**. Next, the first elongate member **1103** is slid upwardly/vertically so that the second mounting element **1106** enters into the smaller width portion of the second mounting element **1106** and the D-ring becomes hooked onto/engaged with the first mounting element **1111a**. This dual mount system prevents substantial movement of the first elongate member **1103** relative to the support structure **1101**.

Referring to FIGS. **23A-23D**, another embodiment of an over-the-door hanging apparatus **1200** will be described. The over-the-door hanging apparatus **1200** generally comprises a support structure **1201** having a rear surface **1202**, first and second elongate members **1203** (only the first elongate member is illustrated, it being understood that the second elongate member is identical thereto), and first and second pairs of mounting elements **1204** (only the first pair of mounting elements is illustrated, it being understood that the second pair of mounting elements is identical but positioned on the opposite side of the support structure **1201** as has been discussed in the previous embodiments). As with the embodiments above with regard to FIGS. **21A-21B** and **22A-22C**, FIGS. **23A-23D** only illustrate a portion of the over-the-door hanging apparatus **1200** sufficient to show the mount system for mounting the first and second elongate members **1203** to the support structure **1201** via the first and second pairs of mounting elements **1204**.

As with the previously described embodiments, the first pair of mounting elements **1204** is coupled or secured to the rear surface **1202** of the support structure **1201**. In this embodiment, the first pair of mounting elements **1204** comprises a first mounting element **1205** and a second mounting element **1206**. In the exemplified embodiment, the first and second mounting elements **1205**, **1206** are illustrated as separate and distinct elements. However, the invention is not to be so limited and the first and second mounting elements **1205**, **1206** may be formed into a single mounting plate that is coupled to the rear surface **1202** of the support structure **1201**. Each of the first and second mounting elements **1205**, **1206** comprises a curved channel **1215**.

The first elongate member **1203** extends from a distal end **1207** to a proximal end **1208** and comprises a first surface **1209** and an opposite second surface **1210**. The first elongate member **1204** comprises first and second mounting elements **1211a**, **1211b** extending from the first surface **1209** and a first bracket **1212** extending from the second surface **1210**. The first and second mounting elements **1211a**, **1211b** are hooks that are configured to cooperate with the first and second mounting elements **1205**, **1206** of the first pair of mounting elements **1204** to mount the first elongate member **1203** to the support structure **1201**. In the exemplified embodiment, the first mounting element **1211a** is a hook that extends outwardly and downwardly towards the distal end **1207** of the first elongate member **1203** and the second mounting element **1206** is a hook that extends outwardly and upwardly towards the proximal end **1208** of the first elongate member **1203**. However, the invention is not to be so limited in all embodiments and both of the first and second mounting elements **1211a**, **1211b** of the first elongate member **1203** may extend outwardly and upwardly towards the proximal end **1208** in other embodiments. The first bracket **1212** is configured to engage a top edge of a door to support the over-the-door hanging apparatus **1200** from the door.

FIGS. **23C** and **23D** illustrate the manner of mounting the first elongate member **1203** to the support structure **1201** via the first and second mounting elements **1205**, **1206** of the first pair of mounting elements **1204**. The first elongate member **1203** is positioned adjacent to the first and second

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mounting elements **1205**, **1206** of the first pair of mounting elements **1204** so that the first and second mounting elements **1211a**, **1211b** of the first elongate member **1203** are aligned with openings into the channels **1215** of the first and second mounting elements **1205**, **1206** of the first pair of mounting elements **1204**. Next, the first elongate member **1203** is rotated about an axis that is perpendicular to the first and second surfaces **1209**, **1210** of the first elongate member **1203** so that the first mounting element **1211a** of the first elongate member **1203** enters into the channel **1215** of the first mounting element **1205** and the second mounting element **1211b** of the first elongate member **1203** enters into the channel **1215** of the second mounting element **1206**. Thus, the main difference between this embodiment and those that were previously described is that the coupling is achieved via a rotational movement of the first elongate member **1203** relative to the support structure **1201**. The same rotational technique is used for mounting the second elongate member to the second pair of mounting elements.

Referring to FIGS. **24A-24C** concurrently, another embodiment of an over-the-door hanging apparatus **1300** will be described. The over-the-door hanging apparatus **1300** generally comprises a support structure **1301** having a rear surface **1302**, first and second elongate members **1303**, **1313**, and first and second pairs of mounting elements **1304**, **1314**. As with the embodiments above with regard to FIGS. **21A-21B**, **22A-22C**, and **23A-23D**, FIGS. **24A-24C** only illustrate a portion of the over-the-door hanging apparatus **1300** sufficient to show the mount system for mounting the first and second elongate members **1303**, **1313** to the support structure **1301** via the first and second pairs of mounting elements **1304**, **1314**.

As with the previously described embodiments, the first and second pairs of mounting elements **1304**, **1314** are coupled or secured to the rear surface **1302** of the support structure **1301** on opposite sides of a vertical centerline of the support structure **1301**. In this embodiment, the first pair of mounting elements **1304** comprises a first mounting element **1305** and a second mounting element **1306** and the second pair of mounting elements **1314** comprises a first mounting element **1315** and a second mounting element **1316**. In the exemplified embodiment, the first and second mounting elements **1305**, **1306** of the first pair of mounting elements **1304** are positioned on a single plate and the first and second mounting elements **1315**, **1316** of the first pair of mounting elements **1314** are positioned on a single plate. However, the invention is not to be limited in this regard in all embodiments.

The first elongate member **1303** extends from a distal end **1307** to a proximal end **1308** and comprises a first surface **1309** and an opposite second surface **1310**. The first elongate member **1304** comprises first and second mounting elements **1311a**, **1311b** extending from the first surface **1309** and a first bracket **1312** extending from the second surface **1310**. Of course, more than two mounting elements may extend from the first surface **1309** of the first elongate member **1304** in other embodiments. In the exemplified embodiment, the first and second mounting elements **1311a**, **1311b** are hooks that are configured to cooperate with the first and second mounting elements **1305**, **1306** of the first pair of mounting elements **1304** to mount the first elongate member **1303** to the support structure **1301**. In the exemplified embodiment, each of the first and second mounting elements **1311a**, **1311b** extends outwardly and upwardly towards the proximal end **1308** of the first elongate member **1303**. The second elongate member **1313** extends from a distal end **1317** to a proximal end **1318** and comprises a first surface **1319** and an

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opposite second surface **1320**. The second elongate member **1314** comprises first and second mounting elements **1321a**, **1321b** extending from the first surface **1319** and a second bracket **1322** extending from the second surface **1320**. The first and second mounting elements **1321a**, **1321b** are hooks that are configured to cooperate with the first and second mounting elements **1315**, **1316** of the second pair of mounting elements **1314** to mount the second elongate member **1313** to the support structure **1301**. In the exemplified embodiment, each of the first and second mounting elements **1321a**, **1321b** extends outwardly and upwardly towards the proximal end **1308** of the first elongate member **1303**. The first and second brackets **1312**, **1322** are configured to engage a top edge of a door to support the over-the-door hanging apparatus **1300** from the door.

The first pair of mounting elements **1304**, and specifically the first and second mounting elements **1305**, **1306** of the first pair of mounting elements **1304**, will now be described, it being understood that the same description applies to the second pair of mounting elements **1314**. In the exemplified embodiment, the first pair of mounting elements **1304** is formed into a plate that is coupled to the rear surface **1302** of the support member **1301**. However, the invention is not to be so limited in all embodiments and the first pair of mounting elements **1304** may be formed directly into the rear surface **1302** of the support member **1301** or each mounting element **1305**, **1306** of the first pair of mounting elements **1304** may be formed into separate plates that are coupled to the rear surface **1302** of the support member **1301**.

The first mounting element **1305** of the first pair of mounting elements **1304** comprises an entry region **1330** and a nesting region **1331**. Similarly, the second mounting element **1306** of the first pair of mounting elements **1304** comprises an entry region **1332** and a nesting region **1333**. The entry regions **1330**, **1332** are vertically oriented channels that permit the first and second mounting elements **1311a**, **1311b** of the first elongate member **1303** to pass therethrough. The nesting regions **1331**, **1333** are horizontally oriented channels.

Thus, as best illustrated in FIGS. **24B** and **24C**, the first elongate member **1303** is coupled to the support member **1301** (and more specifically to the first pair of mounting elements **1304**) via a horizontal sliding motion. Specifically, first the first and second mounting elements **1311a**, **1311b** are aligned with and inserted into the entry regions **1330**, **1332** of the first and second mounting elements **1305**, **1306** of the first pair of mounting elements **1304**. Next, the first elongate arm **1303** is slid horizontally relative to the support structure **1301** so that the first and second mounting elements **1311a**, **1311b** slide horizontally along/within the nesting regions **1331**, **1333** of the first and second mounting elements **1305**, **1306** of the first pair of mounting elements **1304**. There is either a cutout formed into the rear surface **1302** of the support structure **1301** or the plate that contains the first pair of mounting elements **1304** is raised to provide a pocket or open space within which the first and second mounting elements **1311a**, **1311b** can nest. Thus, this embodiment utilizes a horizontal sliding motion between the first elongate arm **1303** and the support structure **1301** to mount the first elongate arm **1303** to the support structure **1301** via the first pair of mounting elements **1304**.

Referring to FIGS. **25A** and **25B**, another embodiment of an over-the-door hanging apparatus **1400** is illustrated and will be described. The over-the-door hanging apparatus **1400** generally comprises a support structure **1401** having a rear surface **1402** and a mirror or other flat article coupled

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to the support structure **1401**, first and second elongate members **1403**, **1413**, and a mounting bracket **1404** secured or coupled to the rear surface **1402** of the support structure **1401**. The first and second elongate members **1403**, **1413** are similar in structure to the previously described first and second elongate members. Specifically, the first elongate member **1403** comprises a plurality of mounting elements **1411** (a first mounting element **1411a**, a second mounting element **1411b**, and a third mounting element **1411c**) and a first bracket **1412**. The second elongate member **1413** comprises a plurality of mounting elements **1421** (a first mounting element **1421a**, a second mounting element **1421b**, and a third mounting element **1421c**) and a second bracket **1422**.

The main difference in this embodiment relative to those previously described is that rather than having a mounting plate or pairs of mounting elements on the rear surface **1402** of the support structure **1401**, there is a single mounting bracket **1404**. The mounting bracket **1404** comprises first portions **1405** that are secured directly to the rear surface **1402** of the support structure **1401** and second portions **1406** that are raised relative to the rear surface **1402** of the support structure **1401**. Thus, the first portions **1405** of the mounting bracket **1404** are in direct surface contact with the rear surface **1402** of the support structure **1401** to couple the mounting bracket **1404** to the support structure **1401** and the second portions **1406** of the mounting bracket **1404** are spaced apart from the rear surface **1402** of the support structure **1401**. The mounting bracket **1404** extends horizontally along the rear surface **1402** of the support structure **1401** transverse to a vertical centerline of the support structure **1401**. The first portions **1405** of the mounting bracket **1404** are on opposing ends of the mounting bracket **1404** and the second portion **1406** of the mounting bracket **1404** extends between the first portions **1405** of the mounting bracket.

FIG. 25A illustrates the first and second elongate members **1403**, **1413** detached from the mounting bracket **1404** and FIG. 25B illustrates the first and second elongate members **1403**, **1413** attached or mounted to the mounting bracket **1404**. To mount the first elongate arm **1403** to the mounting bracket **1404**, one of the first, second, and third mounting elements **1411a-c** of the first elongate arm **1403** (which may be hooks as described herein above) is aligned with a bottom edge of the raised portion **1406** of the mounting bracket **1404**. The first elongate member **1403** is then slid vertically to trap the raised portion **1406** of the mounting bracket **1404** within the slot or space formed by the mounting element **1411a-c** being used. Any of the first, second, and third mounting elements **1411a-c** may be used depending on the desired hanging height of the support structure **1401**. Specifically, if the first mounting element **1411a** is used, the support structure **1401** will hang lower and if the third mounting element **1411c** is used the support structure will hang higher. The same technique is used for mounting the second elongate member **1413** to the mounting bracket **1404**. In FIG. 25B, the second mounting elements **1411b**, **1421b** of the first and second elongate members **1403**, **1413** are used in the mounting.

Although only a single mounting bracket **1404** is used in the exemplified embodiment, in alternative embodiments a second mounting bracket may also be coupled to the rear surface **1402** of the support structure **1401** at a vertical position above or below the mounting bracket **1404**. When two mounting brackets are used, two of the mounting elements **1411a-c**, **1421a-c** of the first and second elongate members **1403**, **1413** will engage with mounting brackets simultaneously, resulting in a more secure attachment

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between the first and second elongate members **1403**, **1413** and the support structure **1401**, allowing less potential movement of the support structure **1401** when it is hanging from a door as described herein above.

FIG. 25C illustrates an embodiment of an over-the-door hanging apparatus **1500** that is similar to the over-the-door hanging apparatus **1400** of FIGS. 25A and 25B except as described herein below. Thus, the description above with regard to the over-the-door hanging apparatus **1400** is applicable to this embodiment except for the differences specifically described below. In this embodiment, the mounting bracket **1504** has two raised portions **1406a**, **1406b** and three non-raised portions **1405a-c**. The non-raised portion **1405c** is positioned and extends in between the two raised portions **1406a**, **1406b**. Thus, in this embodiment the raised portions **1406a**, **1406b** are reduced in length relative to the raised portion **1406** of the over-the-door hanging apparatus **1400**. This will reduce horizontal sliding of the first and second elongate members **1403**, **1413** when the first and second elongate members **1403**, **1413** are mounted to the mounting bracket **1504**.

FIGS. 25D and 25E illustrate still another embodiment of an over-the-door hanging apparatus **1600** that is similar to the over-the-door hanging apparatus **1400** of FIGS. 25A and 25B except as described herein below. Thus, the description above with regard to the over-the-door hanging apparatus **1400** is applicable to this embodiment except for the differences specifically described below. In this embodiment, the mounting bracket **1604** is a generally flat, planar structure extending across the width of the support structure **1401**. However, in this embodiment there are two cutouts **1606a**, **1606b** formed into the rear surface **1402** of the support structure **1401** from a location adjacent a top edge **1640** of the mounting bracket **1604** vertically downwardly beyond a bottom edge **1641** of the mounting bracket **1604**.

To mount the first elongated member **1403** to the mounting bracket **1604**, one of the mounting elements **1411a-c** of the first elongated member **1403** is inserted into the cutout **1606a**, and then the first elongated member **1403** is slid upwardly. Similarly, to mount the second elongated member **1413** to the mounting bracket **1604**, one of the mounting elements **1421a-c** of the second elongated member **1413** is inserted into the cutout **1606b**, and then the second elongated member **1413** is slid upwardly.

Referring to FIG. 26, another embodiment of an over-the-door hanging apparatus **1700** is illustrated. The over-the-door hanging apparatus **1700** is similar to the over-the-door hanging apparatus **1000** of FIGS. 21A and 21B except that instead of using set screws as the mounting elements that are secured to the rear surface **1702** of the support structure **1701** and to which the first and second elongated members **1703**, **1713** are mounted to the support structure **1701**, barbs **1705a**, **1705b**, **1706a**, **1706b** are used. Thus, the first and second elongated members **1703**, **1713** may be aligned with the rear surface **1702** of the support structure **1701** as desired, and then the barbs may be inserted into through-holes (i.e., mounting elements) formed into the first and second elongated members **1703**, **1713**. The material and construction of the barbs **1705a**, **1705b**, **1706a**, **1706b** and the material of the support structure **1701** may be such that the barbs **1705a**, **1705b**, **1706a**, **1706b** are able to be press fit into the support structure **1701** with the force of a user's hand or thumb/fingers. Alternatively, the rear surface **1702** of the support structure **1701** may include pre-drilled holes into which the barbs **1705a**, **1705b**, **1706a**, **1706b** may be press-fit to secure the first and second elongate members **1703**, **1713** to the support structure **1701**. This embodiment



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may be used in combination with a plate (not shown) that is affixed to the rear surface **1702** of the support structure **1701** or without such a plate as shown in the exemplified embodiment.

Rather than barbs **1705a**, **1705b**, **1706a**, **1706b**, any type of fastener (bolts, rivets, screws, eye lags, etc.) may be used. Alternatively, the elongated members **1703**, **1713** may be secured to the rear surface **1702** of the support structure **1701** using adhesive, hook-and-loop fasteners, or the like.

Referring to FIGS. **27-29** concurrently, a bracket member **2000** will be described in accordance with another embodiment of the present invention. FIGS. **27-35D** all relate to the bracket member **2000** and its use. Specifically, FIGS. **27-29** illustrate the bracket member **2000** by itself, FIGS. **30-32D** illustrate the bracket member supporting two distinct products, and FIGS. **33-35D** illustrate the bracket member supporting two distinct products whereby at least one of the products in FIGS. **33-35D** is different than one of the products in FIGS. **30-32D**. This section of the application will begin with a description of the bracket member **2000** and will follow with a description of how various products or support structures are mounted to the bracket member **2000** and how the bracket member **2000** is mounted to a door.

The bracket member **2000** is configured to engage a top edge of a door to mount the bracket member **2000** to the door in a similar manner to that which has been described above. Specifically, the bracket member **2000** comprises a top portion **2001** extending from a first end **2002** to a second end **2003**, a first portion **2004** extending along a first axis A-A from the first end **2002** of the top portion **2001** to a distal edge **2005**, and a second portion **2006** extending along a second axis B-B from the second end **2003** of the top portion **2001** to a distal edge **2007**. In the exemplified embodiment, each of the first and second portions **2004**, **2006** extend perpendicularly from the top portion **2001**, although the invention is not to be so limited in all embodiments. Thus, in the exemplified embodiment the bracket member **2000** is in the shape of a “U” although one of the legs of the “U” is longer than the other as discussed below.

The first portion **2004** has a first length **L1** measured from the top portion **2001** to the distal edge **2005** and the second portion **2006** has a second length **L2** measured from the top portion **2001** to the distal edge **2007**. In the exemplified embodiment, the first length **L1** is greater than the second length **L2**. In some embodiments, the first length **L1** may be between 450 mm and 470 mm and the second length may be between 340 mm and 360 mm. Of course, lengths outside of these ranges are possible in other embodiments as would be understood by persons skilled in the art. In some embodiments the first length **L1** may be approximately 100 mm-120 mm greater than the second length **L2**. In some embodiments a ratio of **L1:L2** is between 1.2:1 and 1.4:1, and more specifically approximately 1.3:1.

The top portion **2001** of the bracket member **2000** extends along an axis that is generally perpendicular to the first and second axes A-A, B-B. Furthermore, the first and second axes A-A, B-B, and hence also the first and second portions **2004**, **2006** of the bracket member **2000**, are generally parallel to one another. The first and second portions **2004**, **2006** are spaced apart from one another along their length thereby forming a gap **2008** that is configured to receive a portion of a door when the bracket member **2000** is mounted to the door. Specifically, the bracket member **2000** is mounted to a door by positioning the top portion **2001** of the bracket member **2000** adjacent a top edge of the door so that the first and second portions **2004**, **2006** extend along the

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front and rear surfaces of the door, respectively. The bracket member **2000** can slide side-to-side along the door but cannot be removed from the door without lifting the bracket member **2000** until the first and second portions **2004**, **2006** are above the top edge of the door or sliding the bracket member **2000** until it slides off the free edge of the door (opposite the hinges).

In the exemplified embodiment, the gap **2008** between the first and second portions **2004**, **2006** of the bracket member **2000** has a constant width measured between the first and second portions **2004**, **2006** of the bracket member **2000** (which is generally dictated by the length of the top portion **2001** of the bracket member **2000** measured between the first and second ends **2002**, **2003**). The exact width of the gap **2008** is not limiting of the present invention but may be selected depending on the thickness of the door to which the bracket member **2000** is to be mounted (approximately 35-55 mm in some embodiments). Furthermore, it is possible that the bracket member **2000** may be formed of a material that permits the first and second portions **2004**, **2006** to each be pivoted/rotated relative to the top portion **2001**, which would enable the gap **2008** to increase or decrease in width. This may be possible due to the thickness of the material or the particular material chosen regardless of thickness. However, when in a biased un-pivoted position, the width of the gap **2008** is constant along the entirety of the lengths of the first and second portions **2004**, **2006** of the bracket member **2000**. Thus, the bracket member **2000** is a generally U-shaped member such that when it is mounted to the top edge of a door, the top portion **2001** is adjacent to and in contact with the top edge of the door, the first portion **2004** is adjacent to and possibly in contact with one of the major surfaces (front or rear) of the door, and the second portion **2006** is adjacent to and possibly in contact with the other of the major surfaces (front or rear) of the door.

The first portion **2004** of the bracket member **2000** comprises a front surface **2009** and an opposite rear surface **2010**. Similarly, the second portion **2006** of the bracket member **2000** comprise a front surface **2011** and an opposite rear surface **2012**. The rear surface **2010** of the first portion **2004** of the bracket member **2000** faces the rear surface **2012** of the second portion **2006** of the bracket member **2000**, although the rear surfaces **2010**, **2012** are separated by the gap **2008** as described herein. When mounted to a door, the rear surfaces **2010**, **2012** of the first and second portions **2004**, **2006** of the bracket member **2000** face and/or are in contact with the door while the front surfaces **2009**, **2011** of the first and second portions **2004**, **2006** of the bracket member **2000** face away from the door.

A first plurality of hooks **2020** extend from the front surface **2009** of the first portion **2004**. The first plurality of hooks **2020** are arranged in a spaced apart manner along the first axis A-A. The first plurality of hooks **2020** comprises a first hook **2021** adjacent to but spaced apart from the distal end **2005** of the first portion **2004** of the bracket member **2000** by a first distance **D1**, a second hook **2022** adjacent to but spaced apart from the first hook **2021** by a second distance **D2**, and a third hook **2023** adjacent to but spaced apart from the second hook **2022** by a third distance **D3**. Thus, none of the hooks **2021**, **2022**, **2023** of the first plurality of hooks **2020** is located at the distal end **2005** of the first portion **2004**, but rather all are spaced some distance along the first axis A-A from the distal end **2004**. As shown in FIG. **29**, in the exemplified embodiment the second and third distances **D2**, **D3** are the same and are greater than the first distance **D1**. However, the invention is not to be so limited in all embodiments and the spacing between the

hooks **2021**, **2022**, **2023** may be different in other embodiments. Furthermore, although the exemplified embodiment includes three hooks **2021**, **2022**, **2023** in the first plurality of hooks **2020**, the invention is not to be so limited and the first plurality of hooks **2020** may include two hooks or more than three hooks in various alternative embodiments. Furthermore, rather than a plurality of hooks, in some embodiments just one hook may extend from the front surface **2009** of the first portion **2004**.

The second portion **2006** of the bracket member **2000** comprises a second plurality of hooks **2030** extending from the front surface **2011** of the second portion **2006**. The second plurality of hooks **2030** are arranged in a spaced apart manner along the second axis B-B. The second plurality of hooks **2030** comprises a fourth hook **2031** adjacent to but spaced apart from the distal end **2007** of the second portion **2006** of the bracket member **2000** by a fourth distance **D4**, a fifth hook **2032** adjacent to but spaced apart from the fourth hook **2031** by a fifth distance **D5**, and a sixth hook **2033** adjacent to but spaced apart from the fifth hook **2032** by a sixth distance **D6**. Thus, none of the hooks **2031**, **2032**, **2033** of the second plurality of hooks **2030** is located at the distal end **2007** of the second portion **2006**, but rather all are spaced some distance along the second axis B-B from the distal end **2007**. The second plurality of hooks **2030** may include two hooks or more than three hooks, and in some embodiments there may simply be a single hook rather than a plurality of hooks extending from the second portion **2006**.

As shown in FIG. 29, in the exemplified embodiment the fifth and sixth distances **D5**, **D6** are the same and are greater than the fourth distance **D4**. Furthermore, in the exemplified embodiment the first and fourth distances **D1**, **D4** are the same and the second, third, fifth, and sixth distances **D2**, **D3**, **D5**, **D6** are the same. In some embodiments, the first and fourth distances **D1**, **D4** are in a range of approximately 12 mm-15 mm whereas the second, third, fifth, and sixth distances **D2**, **D3**, **D5**, **D6** are in a range of 40 mm-50 mm. Furthermore, in the exemplified embodiment the length of the hooks (measured from a bottom-most edge of the hook to a top-most edge of the hook in the direction of the axes A-A, B-B) is between 10-15 mm. However, these ranges are provided with reference to one possible embodiment and distances/spacing between the hooks outside of these noted ranges are possible in other embodiments. Furthermore, it should be appreciated that the invention is not to be limited in all embodiments by the specific spacing illustrated in the drawings and described herein and thus the spacing between the hooks **2031**, **2032**, **2033** may be different in other embodiments. Furthermore, although the exemplified embodiment includes three hooks **2031**, **2032**, **2033** in the second plurality of hooks **2030**, the invention is not to be so limited and the second plurality of hooks **2030** may include two hooks or more than three hooks in various alternative embodiments (or a single hooks).

Each of the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** has a width measured along a width of the first or second portion **2004**, **2006** of the bracket member **2000** from which it extends that is less than the width of the first or second portion **2004**, **2006**. Thus, the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** do not span the entire width of the bracket member **2000**, but rather are centrally located (in the width direction) within the first or second portion **2004**, **2006** from which it extends. This is because in the exemplified embodiment the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** are formed by punching out a portion of the first and/or second portions **2004**, **2006** of the bracket member **2000** and subsequent bending as described above. Thus, the width of

the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** must be less than the width of the first and second portions **2004**, **2006** of the bracket member **2000**.

In the exemplified embodiment, each of the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** is similar in shape and function to the hooks **161**, **162** described above with reference to FIGS. 3A and 3B. Thus, the details of the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** will not be further described herein, it being understood that the description already made previously herein is applicable. Specifically, despite the description of the hooks **161**, **162** being made with regard to a different embodiment, the details remain the same and thus are equally applicable to this embodiment.

Due to the first length **L1** of the first portion **2004** of the bracket member **2000** being greater than the second length **L2** of the second portion **2006** of the bracket member **2000**, the hooks of the first and second pluralities of hooks **2020**, **2030** are generally not aligned with one another. In fact, although there is some slight overlap between one of the hooks of the first plurality of hooks **2020** and one of the hooks of the second plurality of hooks **2030** as discussed below, none of the hooks of the first plurality of hooks **2020** is perfectly aligned with any of the hooks of the second plurality of hooks **2030**. Of course, in other embodiments alignment of the hooks of the first and second pluralities of hooks **2020**, **2030** may occur.

In the exemplified embodiment, each of the first and second hooks **2021**, **2022** of the first plurality of hooks **2020** is spaced a greater distance from the top portion **2001** of the bracket member **2000** than each of the second plurality of hooks **2030**. In fact, in the exemplified embodiment there exists no plane transverse (perpendicular) to the first and second axes A-A, B-B that intersects one of the first and second hooks **2021**, **2022** of the first plurality of hooks **2020** and any portion of the second portion **2030** of the bracket member **2000**. This is because the first and second hooks **2021**, **2022** of the first plurality of hooks **2020** are located at a position on the first portion **2004** of the bracket member **2000** that extends beyond the distal end **2007** of the second portion **2006** of the bracket member **2000** in a direction of the first and second axes A-A, B-B.

Furthermore, in the exemplified embodiment the third hook **2023** of the first plurality of hooks **2020** is transversely aligned with the second portion **2006** of the bracket member **2000**. Specifically, the third hook **2023** of the first plurality of hooks **2020** is spaced a greater distance from the top portion **2001** than each of the fifth and sixth hooks **2032**, **2033** of the second plurality of hooks **2030** and a lesser distance from the top portion **2001** than the fourth hook **2031** of the second plurality of hooks **2030**. Thus, the fourth hook **2031** is located further from the top portion **2001** of the bracket member **2000** than the third hook **2023**. As can be seen, a plane **RP1** that is orthogonal to the first and second axes A-A, B-B exists that intersects the third hook **2023** of the first plurality of hooks **2020** and the fourth hook **2031** of the second plurality of hooks **2030**. The third hook **2023** of the first plurality of hooks **2020** and the fourth hook **2031** of the second plurality of hooks **2030** are not in perfect transverse alignment, but they have some overlap which results in their both being intersected by the plane **RP1**. In the exemplified embodiment, the third hook **2023** of the first plurality of hooks **2020** is closer to the top portion **2001** than the fourth hook **2031** of the second plurality of hooks **2030**.

Referring to FIGS. 30A, 30B, and 31, an over-the-door hanging apparatus **2500** is illustrated that utilizes two of the bracket members **2000** each coupled to first and second support structures **2100**, **2200** for supporting the first and

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second support structures **2100**, **2200** by a door **10**. Although these figures illustrate two of the bracket members **2000** being used, the invention is not to be so limited and a single one of the bracket members **2000** may be used by itself without a second bracket member **2000** while still achieving the same function as described herein, which is to hang the first and second support structures **2100**, **2200** from the door. Furthermore, more than two of the bracket members **2000** may also be used to support each of the first and second support structures **2100**, **2200** in still other embodiments. Although one specific embodiment is illustrated in the drawings and described herein regarding the manner of coupling the bracket members **2000** to the first and second support structures **2100**, **2200**, the first and second support structures **2100**, **2200** may be coupled to the bracket members **2000** in any one of the manners as has been described herein above. Thus, the invention is not to be limited by the specific embodiment shown in the drawings but the entire disclosure set forth in this application may be applicable to this embodiment, particularly with regard to the details of the mounting elements that are coupled to the support structures **2100**, **2200** and the manner of coupling the bracket members **2000** to the support structures **2100**, **2200**.

In the exemplified embodiment, the first support structure **2100** comprises a front surface **2101** and an opposite rear surface **2102**. The first support structure **2100** extends along a longitudinal axis C-C. A first mounting element **2110** is coupled to the rear surface **2102** of the first support structure **2100**. Similarly, the second support structure **2200** comprises a front surface **2201** and an opposite rear surface **2202**. The second support structure **2200** extends along a longitudinal axis D-D. A second mounting element **2210** is coupled to the rear surface **2202** of the second support structure **2200**. In the exemplified embodiment, a third mounting element (not visible in the drawings) having an identical structure to the first mounting element **2110** is also coupled to the rear surface **2102** of the first support structure **2100** and a fourth mounting element **2211** having an identical structure to the second mounting element **2210** is coupled to the rear surface **2202** of the second support structure **2200**. Specifically, as with the embodiments discussed previously above, the first and third mounting elements **2110** are coupled to the rear surface **2102** of the first support structure **2100** on opposite sides of the longitudinal axis C-C and the second and fourth mounting elements **2210**, **2211** are coupled to the rear surface **2202** of the second support structure **2200** on opposite sides of the longitudinal axis D-D.

In the exemplified embodiment, the first and second mounting elements **2110**, **2210** (and also the third and fourth mounting elements **2211**) are plates having apertures therein that are aligned with apertures in the rear surfaces **2102**, **2202** of the first and second support structures **2100**, **2200**. Thus, in the exemplified embodiment the mounting elements **2210**, **2211**, **2210** are similar to the mounting plates **120**, **220** described previously herein. As such, one or more of the hooks **2021**, **2022**, **2023**, **2031**, **2032**, **2033** of the bracket members **2000** may be inserted through the apertures in the plates to mount the support structures **2100**, **2200** to the bracket members **2000** as has been described herein above with specific reference to FIGS. 1-9. However, any of the alternative mounting mechanisms can be used as the first and second mounting elements **2110**, **2210** in place of the plate such as the plate segments **621** of FIG. 10, the mounting plates **820** of FIGS. 15A and 15B, the mounting elements **1104** of FIG. 22A, the mounting elements **1205**, **1206** of FIG. 23A, the mounting elements **1304** of FIG. 24A,

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and the mounting brackets **1404**, **1504**, **1604** of FIGS. 25A-25E. Thus, the entirety of the disclosure set forth in this document is applicable to this particular embodiment. The difference is that in this embodiment the bracket member **2000** has two elongated portions that are each configured to support a product so that the bracket member **2000** can support two products rather than just one as with the embodiments previously described herein. However, the manner in which the products are mounted to the bracket member **2000** is the same.

In the exemplified embodiment, a writing surface **2120** is coupled to the front surface **2101** of the first support structure **2100**. Stated another way, the writing surface **2120** is exposed at the front surface **2101** of the first support structure **2100** so that a user can write on the writing surface **2120**. Thus, the first support structure **2100** is essentially a frame or other type of structure that is configured to support the writing surface **2120**. Collectively, the first support structure **2100** and the writing surface **2120** form a first product. In the exemplified embodiment, the writing surface **2120** may be a chalkboard, a blackboard, a white board or any other type of writing surface on which a user can write with a marking instrument and then erase for reuse. Alternatively, the writing surface **2120** may not be reusable in other embodiments but may instead be a pad of paper or the like that is coupled to the first support structure **2100** and can be written on but generally not erased (unless using pencil).

In the exemplified embodiment, a mirror **2220** is coupled to the front surface **2201** of the second support structure **2200**. Thus, the mirror **2220** is exposed at the front surface **2201** of the second support structure **2200** so that a user can view themselves in the mirror as desired. Thus, the second support structure **2200** is essentially a frame or other type of structure that is configured to support the mirror **2220**. Collectively, the second support structure **2200** and the mirror **2220** form a second product.

As with the previously described embodiments, the first support structure **2100** is mounted to the (or each when more than one is used as shown in FIGS. 30A and 30B) bracket member **2000** through slidable mating between one of the mounting elements **2110** coupled to the rear surface **2102** of the first support structure **2100** and at least one of the first plurality of hooks **2020** of the bracket member **2000**. Similarly, the second support structure **2200** is mounted to the (or each when more than one is used as shown in FIGS. 30A and 30B) bracket member **2000** through slidable mating between one of the mounting elements **2210** coupled to the rear surface **2202** of the second support structure **2200** and at least one of the second plurality of hooks **2030** of the bracket member **2000**. Thus, the first and second support structures **2100**, **2200** are mounted to the same bracket member **2000**, and possibly to more than one bracket member **2000** such as is shown in the exemplified embodiment. Multiple bracket members **2000** may be used for mounting each of the first and second support structures **2100**, **2200** to provide added support, but this is not required in all embodiments and a single bracket member **2200** may be used as would be appreciated by persons skilled in the art. If a single bracket member **2200** is used to support the first and second support structures **2100**, **2200** the mounting elements **2110**, **2210** may be located on the longitudinal axes C-C, D-D of the first and second support structures **2100**, **2200** to facilitate a proper mounting orientation. There are no tools required to achieve the mounting of the first and second support structures **2100**, **2200** to the bracket member **2000** as has been described in great detail herein.

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FIG. 31 illustrates the first and second support structures 2100, 2200 mounted to the bracket member 2000 and the bracket member 2000 mounted to a door 10. As seen, the rear surfaces 2010, 2012 of the first and second portions 2004, 2006 of the bracket member 2000 are adjacent to and/or in contact with the opposing major surfaces (i.e., front and rear surfaces) of the door 10 and the top portion 2001 of the bracket member 2000 is adjacent to and/or in contact with the top edge of the door 10. The first support structure 2100 is mounted to the first portion 2004 of the bracket member 2000 via at least one of the first plurality of hooks 2020 and the second support structure 2200 is mounted to the second portion 2006 of the bracket member 2000 via at least one of the second plurality of hooks 2030. This mounting technique results in the writing surface 2120 being exposed on a first side 11 of the door 10 and the mirror 2220 being exposed on the second opposite side 12 of the door 10.

Although in the exemplified embodiment the first support structure 2100 (comprising the writing surface 2120) is illustrated and described as being coupled to the first portion 2004 of the bracket member 2000 and the second support structure 2200 (comprising the mirror 2220) is illustrated and described as being coupled to the second portion 2006 of the bracket member 2000, the invention is not to be so limited in all embodiments. Thus, this may be flipped in alternative embodiments if so desired so that the first support structure 2100 is coupled to the second portion 2006 of the bracket member 2000 and the second support structure 2200 is coupled to the first portion 2004 of the bracket member 2000. Furthermore, products other than writing surfaces and mirrors may be mounted to the bracket member 2000 in other embodiments, one such embodiment being described herein with reference to FIGS. 33-35D. Another product type may be a picture frame, an electronic display, or the like. Really any type of product desired to be hung from/ mounted to a surface of a door without putting holes into the door can be used. Moreover, in some embodiments the same product may be hung from both the first and second sides of the door 11, 12 (a mirror, a writing surface, or some other type of product on both opposing sides of the door).

FIGS. 32A and 32B are illustrations of the first surface 11 of the door 10 having the bracket member 2000 mounted thereon with the first and second support structures 2100, 2200 coupled to the bracket member 2000. In this view, only the first support structure 2100 is visible because the second support structure 2200 is located at the second surface 12 of the door 10 as shown in FIGS. 32C and 32D discussed below. Comparing FIG. 32A to FIG. 32B, these figures illustrate the manner in which the hanging height of the first support structure 2100 may be modified depending on which of the first plurality of hooks 2020 the first mounting element 2110 of the first support structure 2100 is coupled to. Specifically, in FIG. 32A the mounting element 2110 of the first support structure 2100 is coupled to the first hook 2021 of the first plurality of hooks 2020. In FIG. 32B the mounting element 2110 of the first support structure 2100 is coupled to the second and/or the third hook 2022, 2023 of the first plurality of hooks 2020. Depending on which hooks are used, the vertical height of the first support structure 2100 on the door 10 may be modified. As seen in these figures, the writing surface 2120 is exposed at the first surface 11 of the door 10 so that a user can write thereon as desired.

Comparing FIG. 32C to FIG. 32D, these figures illustrate the manner in which the hanging height of the second support structure 2200 may be modified depending in which

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of the second plurality of hooks 2030 the mounting element 2210 of the second support structure 2200 is coupled to. Specifically, in FIG. 32C the mounting element 2210 of the second support structure 2200 is coupled to the fourth hook 2031 of the second plurality of hooks 2030. In FIG. 32B the mounting element 2210 of the second support structure 2200 is coupled to the fifth and/or the sixth hook 2032, 2033 of the second plurality of hooks 2030. Depending on which hooks are used, the vertical height of the second support structure 2200 on the door 10 may be modified. As seen in this figure, the mirror 2220 is exposed at the second surface 12 of the door 10 so that a user can view themselves in the mirror 2220 as desired.

In certain embodiments, the invention may be directed to a kit that comprises one or two (or more as necessary) of the bracket members 2000, the first support structure 2100 comprising the writing surface (i.e., a first product), and the second support structure 2200 comprising the mirrored surface (i.e., a second product). When packaged, the first support structure 2100 would include the writing surface 2120 and the first mounting element 2110 and the second support structure 2200 would include the mirror 2220 and the second mounting element 2210. Thus, these components may be packaged together into a singular item that is sold at a retail store. A user can purchase the item and very easily hang both the first and second support structures 2100, 2200 from a door without any tools or hardware required. This would be particularly desirable for a college student who may want to hang a mirror from the inside surface of the door that faces the student's bedroom and a chalkboard or whiteboard from the outside surface of the door that faces the dormitory hallway or other bedroom exterior. Of course, there are many other uses for a device of this type, including in an office environment, in a home, or at any other location where it would be desirable to hang two products from opposing sides of a door.

Turning now to FIGS. 33-35D, an over-the-door hanging apparatus 3000 is illustrated in accordance with another embodiment of the present invention. This embodiment is the same as the previously described embodiment illustrated in FIGS. 30A-32D except that the first support structure/product has been modified. As noted above, the first product included the first support structure 2100, the first mounting element 2110 and the writing surface 2120. In this embodiment, the first product is an organizational item 3100 that includes a basket 3101, a hanger 3102, clips 3103, hooks 3104, and mounting elements 3105. The organizational item 3100 may be a bathroom or shower valet, a bathroom or shower caddy, a set of shelves, or similar type of product. Alternatively, the organizational item 3100 may be any type of product that assists a user in organizing his or her belongings. A user can store various items in the basket 3101, can use the hanger 3102 and clips 3103 to hang clothing, and can use the hooks 3104 to hang clothing, bags, purses, hats, or the like. The organizational item 3100 generally comprises a wire frame and includes the mounting elements 3105 that are configured for coupling/mounting to the first plurality of hooks 2020 of the first portion 2004 of the bracket member 2000 (or to the second plurality of hooks 2030 of the second portion 2006 of the bracket member 2000).

FIGS. 35A and 35B illustrate the organizational item 3100 mounted to the bracket member 2000 at two different elevations/heights with the organizational item 3100 being used to store and hold several of a user's belongings. The hanging height of the organizational item 3100 may be readily changed by changing the particular hook to which

the mounting elements **3105** of the organizational item **3100** are coupled. In FIG. **35A** the organizational item **3100** is hung at a lower height than in FIG. **35B**. The organizational item **3100** may be hung at a lower height when the user is smaller, such as a child, and the organizational item **3100** may be hung at a higher height when the user is taller, such as an adult.

As has been discussed above, although specific product types are illustrated in these figures for mounting to the bracket member **2000**, the invention is not to be limited by the products shown in these drawings and described herein in all embodiments. Thus, as mentioned above the same product may be mounted on the opposing sides of the door or any various combinations of different products may be mounted on opposing sides of the door. The products may be writing surfaces, mirrors, organizational items, shelving units, picture frames, posters, other artwork, clothing hanging units, or any other type of product desired to be hung from a door. Unless specifically recited as such in the claims, the invention is not to be limited by the particular product being mounted on the bracket member **2000**.

Referring to FIG. **36A-37C**, an over-the-door hanging apparatus **4000** will be briefly described. The over-the-door hanging apparatus **4000** generally comprises a bracket assembly **4100** and a support structure **4300**. The bracket assembly **4100** is intended to be coupled to the support structure **4300** and then the bracket assembly **4100** can engage a top edge of a door to hang the over-the-door hanging apparatus **4000** from the door.

Referring to FIG. **36A**, the bracket assembly **4100** will be described in greater detail. The bracket assembly **4100** has several features that are similar to bracket assemblies that have been previously described herein, such as the bracket assembly **150**. Thus, certain features may not be described in great detail, it being appreciated that the detailed description provided above for the bracket assembly **150** or any other bracket assemblies previously described may be applicable. The bracket assembly **4100** generally comprises at least one mounting element **4140** for coupling the bracket assembly **4100** to the support structure **4300**, at least one bracket **4150** configured to engage a top edge of a door, and a decorative portion **4130**.

More specifically, the bracket assembly **4100** comprises a first elongate member **4110** and a second elongate member **4120**. The first elongate member **4110** has a front surface **4111** and an opposite rear surface **4112** and the second elongate member **4120** has a front surface **4121** and an opposite rear surface **4122**. The at least one bracket **4150** comprises a first bracket **4150a** extending from the rear surface **4112** of the first elongate member **4110** and a second bracket **4150b** extending from the rear surface **4122** of the second elongate member **4120**. Each of the first and second brackets **4150a**, **4150b** is a U-shaped member that facilitates coupling of the bracket assembly **4100** to the top edge of a door. Specifically, the U-shaped members of the first and second brackets **4150a**, **4150b** may be slid over the top edge of a door as has been described herein with reference to the previously described embodiments.

Furthermore, in the exemplified embodiment, the at least one mounting element **4140** comprises a first hook **4140a** and a second hook **4140b** extending from the front surface **4111** of the first elongate member **4110** and a first hook **4140c** and a second hook **4140d** extending from the front surface **4121** of the second elongate member **4120**. Of course, more or less than two hooks may be present on each of the first and second elongate members **4110**, **4120**. For example, each of the first and second elongate members

**4110**, **4120** may include a single hook, three hooks, or even more than three hooks. Moreover, although hooks are used in the exemplified embodiment as the mounting elements **4140** of the bracket assembly **4100**, the invention is not to be so limited. In other embodiments, the mounting elements **4140** of the bracket assembly **4100** may be apertures rather than hooks. In still other embodiments, the mounting elements **4140** may include additional hardware such as screws, nails, or the like for coupling the bracket assembly **4100** to the support structure **4300**. Where the mounting elements **4140** are hardware, they may still be considered to form a part of the bracket assembly **4100** despite being a separate component. Thus, if the mounting element is a screw that couples the bracket assembly **4100** to the support structure **4300**, the screw may be considered to form part of the bracket assembly **4100**. Furthermore, in still other embodiments the mounting elements **4140** may be hook-and-loop fasteners, adhesive, bolts, pins, key and/or slot, or the like. Furthermore, combinations of mounting elements such as hooks that engage with apertures as well as hardware may be used to couple the bracket assembly **4100** to the support structure **4300**. Thus, the bracket assembly **4100** may be coupled to the support structure using a tools-based system, a no-tools system, or a combination thereof.

In the exemplified embodiment, the hooks **4140a-d** are intended to engage a plate similar to that which has been described above with regard to the hooks **161**, **162** and the mounting plates **120**. Of course, if the mounting elements are apertures instead of hooks, the mounting plate may have hooks that engage the apertures on the bracket assembly **4100**. These embodiments are used for a no tools assembly of the over-the-door hanging apparatus **4000** (i.e., no tools such as screwdrivers or hammers are needed for assembly). However, the invention is not to be so limited and it is possible that a tools-based assembly may be required, for example in embodiments whereby hardware such as screws, nails, or the like are used as the mounting element or a portion thereof to couple the bracket assembly **400** to the support structure **4300**.

In addition, the bracket assembly **4100** comprises the decorative portion **4130**. The decorative portion **4130** may be any type of aesthetic design desirable. For example, the decorative portion **4130** may be a random design that is aesthetically pleasing, it may be a series of letters, numbers, or words, it may be a depiction of a particular object or objects with a theme, such as a bat and ball for a baseball theme, it may depict a particular scene or object (i.e., a flower, a mountain landscape, a known-tourist attraction or symbol) or the like. The decorative portion **4130** may also visually represent an animal, such as a horse, dog, cat, or the like, or it may have the text of a person's name or other desired text such as words of encouragement or words or the like. Thus, the invention is not to be particularly limited by the specific appearance of the decorative portion **4130** except that it should be something that is decorative and appeals to a certain group of people. Thus, the decorative portion **4130** must be ornamental rather than purely functional.

In the exemplified embodiment, the decorative portion **4130** extends between the first and second elongate members **4110**, **4120**. Furthermore, the decorative portion **4130** is located between the mounting elements **4140** and the brackets **4150**. This ensures that the decorative portion **4130** is located at a position on the over-the-door hanging apparatus **4000** that ensures that it will be visible to a user to create a desired aesthetic appeal to the over-the-door hanging apparatus **4000**.

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In the embodiment exemplified in FIG. 36A, the bracket assembly 4100 is an integrally formed monolithic component that comprises the first and second elongate members 4110, 4120, the mounting elements 4140, the brackets 4150, and the decorative portion 4130. The bracket assembly 4100 may be a sheet of stamped metal, lasered MDF, or the like as desired in various different embodiments. Of course, as noted above the mounting elements 4140 may be or include hardware, and in such a case the hardware will be a separate structure although the rest of the bracket assembly 4100 may be a monolithic component.

Referring to FIG. 36B, an alternative embodiment of a bracket assembly 4200 is illustrated. The bracket assembly 4200 comprises a first portion 4201 and a second portion 4205. The first portion 4201 of the bracket assembly 4200 comprises the first elongate member 4202, the first bracket 4203, and a first portion of a decorative member 4204. The second portion 4205 of the bracket assembly 4200 comprises the second elongate member 4206, the second bracket 4208, and a second portion of the decorative member 4207. The first and second portions 4201, 4205 of the bracket assembly 4200 are separate components and each of them is an integrally formed monolithic component. When each of the first and second portions 4201, 4205 of the bracket assembly 4200 is coupled to the support structure 4300, the first and second portions of the decorative member 4204, 4207 collectively form the decorative member. Specifically, in the assembled/installed state, the first and second portions of the decorative member 4204, 4207 abut one another to form the full appearance of the decorative member. Thus, FIGS. 37B and 37C, described more fully below, are applicable to the assembled/installed state for both the bracket assembly 4100 and the bracket assembly 4200.

Referring to FIG. 37A, the support structure 4300 and the bracket assembly 4100 are illustrated in an exploded state with a rear surface 4301 of the support structure 4300 exposed in this view. Similar to the embodiments described above, for example FIGS. 1 and 2, in this embodiment a first mounting plate 4310 and a second mounting plate 4311 are coupled to the rear surface 4301 of the support structure 4300 on opposite sides of a vertical centerline Z-Z of the support structure 4300. The discussion of the mounting plate 120 and the manner in which it is coupled to the frame 101 is applicable to the first and second mounting plates 4310, 4311 and the manner in which they are coupled to the support structure 4300. Briefly, the first mounting plate 4310 comprises at least one aperture 4312 that is aligned with a channel formed into the rear surface 4301 of the support structure 4300. The at least one aperture 4312 is defined by a closed-geometry edge 4313 such that the first mounting plate 4310 comprises at least one edge. The second mounting plate 4311 has an identical structure and arrangement.

Referring collectively to FIGS. 37A and 37B, in the exemplified embodiment the bracket assembly 4100 is coupled to the rear surface 4301 of the support structure 4300 via slidable engagement between at least one of the first and second hooks 4140a, 4140b of the first elongate member 4110 and the first mounting plate 4110 and at least one of the first and second hooks 4140c, 4140d of the second elongate member 4120 and the second mounting plate 4111. Of course, this is merely an exemplary embodiment and other techniques for coupling the bracket assembly 4100 to the support structure 4300 are possible in accordance with the invention described herein. For example, the bracket assembly 4100 may have apertures that engage hooks or protrusions on the mounting plates 4110, 4111. Alternatively, the mounting plate 4110, 4111 may be omitted (or

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not) and the bracket assembly 4100 may be coupled directly to the rear surface 4301 of the support structure 4300 (or to the mounting plate 4110, 4111 when included) using hardware-type fasteners, adhesive, hook-and-loop, or the like. Thus, with regard to this embodiment, the invention is not to be particularly limited by the manner in which the bracket assembly 4100 is coupled to the support structure 4300 to form the over-the-door hanging apparatus 4000. As mentioned above, a no-tools or tools-based assembly may be used for coupling the bracket assembly 4100 to the support structure 4300.

Referring to FIGS. 37B and 37C concurrently, when the bracket assembly 4100 is coupled to the support structure 4300, at least a portion of the decorative portion 4130 of the bracket assembly 4100 protrudes from a top edge 4302 of the support structure 4300. Thus, when the over-the-door hanging apparatus 4000 is made to hang from a door 10 by sliding the brackets 4150 over the top edge of the door 10, the portion of the decorative portion 4130 that protrudes from the top edge 4302 of the support structure 4300 is exposed for viewing by a user. In FIG. 37C, the decorative portion 4130, or at least a portion thereof, is located between the top edge 4302 of the support structure 4300 and the top edge of the door 10 from which the bracket 4150 of the bracket assembly 4100 is hanging.

As seen in FIG. 37C, in the exemplified embodiment a mirror 4305 is coupled to the support structure 4300 and exposed on a front surface 4303 of the support structure 4300. Thus, when the over-the-door hanging apparatus 4000 is hanging from the door 10, the rear surface 4301 of the support structure 4300 is facing the door 10 and the front surface 4303 of the support structure 4300, the mirror 4305, and the decorative portion 4130 of the bracket assembly 4100 are exposed. Of course, the mirror 4305 is not required in all embodiments and the support structure 4300 may support a photograph, illustration, poster, chalkboard, whiteboard, cork board, or any other item that is desired to be displayed while being hung from a door.

In this embodiment, the decorative portion 4130 of the bracket assembly 4100 adds an aesthetic design feature to the over-the-door hanging apparatus 4000 and it can be tailored to a particular user's desires or interests. For example, in FIG. 37C the decorative portion 4130 is a generic aesthetic design feature. However, FIGS. 38A-38C illustrate alternative designs for the decorative portion. Specifically, FIG. 38A illustrates a decorative portion 4130a that has the word "Princess" and a heart. FIG. 38B illustrates a decorative portion 4130b that has a twig or branch with two birds kissing. FIG. 38C illustrates a decorative portion 4130c with the words "Be You." In alternative embodiments not illustrated herein, the decorative portion 4130 could be a theme, such as a sports theme, a hiking theme, a dance theme, a music theme, or any other type of theme imaginable. The decorative portion 4130 could also be text in the form of a person's name or initials. The possibilities for the specific details of the various decorative portions are virtually endless. The requirements for the decorative portion 4130 are merely that it protrudes from the top edge 4302 of the support structure 4300 when the bracket assembly 4100 is coupled to the support structure 4300 and that it comprises ornamentation or some type of a design intended to add a desired aesthetic to the over-the-door hanging apparatus 4000. Thus, the decorative portion 4130 includes a specifically added design to add a decorative feature or ornamental design to the over-the-door hanging apparatus 4000. In some embodiments, the decorative portion 4130 is purely ornamental and not functional other than the fact that it creates

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a desirable aesthetic and makes the over-the-door hanging apparatus **4000** more desirable from an aesthetic standpoint.

Referring to FIGS. **39A** and **39B**, an accessory hook **4400** is illustrated in accordance with an embodiment of the present invention. The accessory hook **4400** is intended to be coupled to a support structure in addition to a bracket assembly as has been described previously herein. Thus, the bracket assembly will serve to hang the over-the-door hanging apparatus from a door as previously described and the accessory hook **4400** provides additional hooks on which a user can hang various articles such as hats, clothing, sunglasses, purses or other bags, or the like. The details of the accessory hooks **4400** will be described with reference to FIGS. **39A** and **39B**, and the manner in which they may be coupled to a support structure will be described with reference to FIGS. **40A-40B**.

In this embodiment, the accessory hook **4400** generally comprises an elongate member **4410** having a front surface **4410** and an opposite rear surface **4412**, at least one mounting element **4413** extending from the rear surface **4412**, an arm **4414** extending from the front surface **4411**, and a hook member **4415** extending from the arm **4414**. In the exemplified embodiment, the elongate member **4410** extends from a first end **4416** to a second end **4417** along a longitudinal axis Y-Y.

Furthermore, in the exemplified embodiment the at least one mounting element **4413** comprises a first hook **4413a** and a second hook **4413b**. The first and second hooks **4413a**, **4413b** extend outwardly and downwardly from the elongate member **4410** to facilitate coupling of the accessory hook **4400** to the support structure in a similar manner to the manner in which the hooks of the bracket assembly previously described are used to couple the bracket assembly to the support structure. In other embodiments, a single hook or more than two hooks could be used. Furthermore, the at least one mounting element **4413** need not be hooks in all embodiments but can be any feature that permits coupling of the accessory hook **4400** to the support structure. For example, the at least one mounting element **4413** can be an aperture in the elongate member **4410** that engages with a hook on a mounting plate that is secured to the rear surface of the support structure. Furthermore, the at least one mounting element **4413** may not be integral with the elongate member **4410** in all embodiments, but it may be a separate piece of hardware such as a screw, nail, hook-and-loop, adhesive, or other type of fastener that secures the accessory hook **4400** to the support structure. Thus, similar to the previous embodiment, in this embodiment the assembly is not limited to a no-tools assembly but the use of tools may be required depending in the manner in which the bracket assembly and the accessory hook **4400** are coupled to the support structure.

In the exemplified embodiment, the hooks **4413a**, **4413b** extend from the rear surface **4412** of the elongate member **4410** and the arms **4414** extend from the front surface **4411** of the elongate member **4410**. In the exemplified embodiment, there are three arms **4414** and three hook members **4415**, but there could be more or less than three of each of these features in other embodiments. As shown, the arms **4414** extend from a first end **4418** to a second end **4419** along an axis X-X. In the exemplified embodiment, the axis X-X of the arms **4414** is perpendicular to the longitudinal axis Y-Y of the elongate member **4410**. Of course, in other embodiments the axis X-X of the arms **4414** may be oblique to the longitudinal axis Y-Y of the elongate member **4410**. The first end **4418** of the arms **4414** are coupled to the

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elongate member **4410**. The hook members **4415** are coupled to the second ends **4419** of each of the arms **4414**.

Turning to FIGS. **40A** and **40B**, the coupling of the accessory hooks **4400** to a support structure **4500** will be described. FIG. **40A** illustrates the accessory hooks **4400** separated from the support structure **4500** and FIG. **40B** illustrates the accessory hooks **4400** coupled to the support structure **4500**. The accessory hooks **4400** can be coupled to and decoupled from the support structure **4500** as desired, and thus the accessory hooks **4400** are alterable between a detached state (FIG. **40A**) and an attached state (FIG. **40B**). In FIG. **40A**, a bracket assembly **4600** is illustrated coupled to a rear surface **4501** of the support structure **4500** in the same manner as described above with reference to FIGS. **1-6**. However, the details of the bracket assembly **4600** and the manner in which it is coupled to the support structure **4500** may be similar to any of the other embodiments described herein. For example, the bracket assembly **4600** may include a decorative portion and the mounting elements of the bracket assembly **4600** may have any of the various shapes as shown in the different embodiments described herein. Furthermore, although in FIGS. **40A** and **40B** the bracket assembly **4600** is coupled to the support structure **4500** using a no-tools arrangement via engagement between hooks of the bracket assembly **4600** and apertures of a mounting plate **4550**, the invention is not to be so limited in all embodiments and tools may be required to secure the bracket assembly **4600** to the support structure **4500** using screws or other hardware.

In the exemplified embodiment, a mounting plate **4550** is coupled to the rear surface **4501** of the support structure **4500** and the bracket assembly **4600** and the accessory hooks **4400** are coupled to the mounting plate **4550**. In this regard, the mounting plate **4550** is similar to the mounting plate **120** described with reference to FIGS. **1-6** except that it has been lengthened and made to include more apertures so that both the bracket assembly **4600** and the accessory hooks **4400** can be coupled to the same mounting plate **4550**. Of course, using the mounting plate **4550** for the coupling of the bracket assembly **4600** and/or the accessory hooks **4400** to the support structure **4500** is only one manner to accomplish said coupling. Other techniques and processes can be used, including separate hardware, adhesive, hook-and-loop, mechanical interlock, and the like.

As shown in FIGS. **40A** and **40B**, in the exemplified embodiment when the bracket assembly **4600** is coupled to the rear surface **4501** of the support structure **4500**, the mounting plate **4550** has apertures that are unused by the bracket assembly **4600** (best seen in FIG. **40A**) and thus available for use to couple the accessory hooks **4400** to the support structure **4500**. Thus, in the exemplified embodiment the accessory hooks **4400** are coupled to the support structure **4500** via slidable engagement between the first and second hooks **4413a**, **4413b** of the accessory hooks **4400** and the available apertures and edges of the mounting plate **4550**. Stated simply, the accessory hook **4400** is coupled to the rear surface **4501** of the support structure **4500** via slidable mating between the at least one mounting element **4413** of the accessory hook **4400** and one or more edges of the mounting plate **4550**. Although both the bracket assembly **4600** and the accessory hooks **4400** are coupled to the same mounting plate **4550**, it should be appreciated that they are separate components in the exemplified embodiment. However, in other embodiments the arms **4414** and the hook members **4415** could extend from the elongate members of the bracket assembly **4600** rather than from a separate component. Thus, the bracket assembly **4600** and the acces-



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sory hook **4400** could be a single, unitary structure in some embodiments rather than being two separate components as illustrated in the exemplified embodiment.

Referring to FIGS. **40B** and **42**, the bracket assembly **4600** and the accessory hook **4400** are both coupled to the support structure **4500** to form an over-the-door hanging apparatus **4700**. As seen in FIG. **40B**, the hooks of the bracket assembly **4600** and the hooks of the accessory hook **4400** extend in opposite directions. The support structure **4500** has the rear surface **4501**, a front surface **4502**, and a perimetric edge **4503** extending between the front and rear surfaces **4501**, **4502**. The perimetric edge **4503** includes a top edge **4504**, a bottom edge **4505**, a first lateral edge **4506**, and a second lateral edge **4507**. Similar to the previously described embodiments, in this embodiment a mirror **4560** is supported by the support structure **4500** and exposed at the front surface **4502** of the support structure **4500**. The mirror **4560** is only used in the exemplified embodiment and can be replaced by a photograph, poster, chalkboard, whiteboard, cork board, or the like in other embodiments.

In the fully assembled state, each of the hook members **4415** is located adjacent to the perimetric edge **4503** of the support structure **4500** in a spaced apart manner. More specifically, each of the hook members **4515** is adjacent to one of the first and second lateral edges **4506**, **4507** of the support structure **4500**. In the exemplified embodiment, the hook members **4515** are spaced apart from the lateral edge **4506**, **4507** that they are adjacent to. In this regard, the arms **4414** have a length that enables the arms **4414** to protrude from the perimetric edge **4503** of the support structure **4500** to maintain the hook members **4515** at a location that is spaced apart from the perimetric edge **4503** of the support structure **4500**. Thus, there is a space having a distance **D7** between the hook members **4515** and the one of the first and second lateral edges **4506**, **4507** of the support structure that the hook members **4515** are adjacent to. Of course, the invention is not to be so limited and the hook members **4515** could be located right up against the perimetric edge **4503** of the support structure **4500** in other embodiments without affecting the functionality and accessibility of the hook members **4515**. As shown in FIG. **42**, the hook members **4515** can be used to hang various items from the over-the-door hanging apparatus **4700**, such as a hat, glasses, a scarf, other articles of clothing, or any other item that can be properly hung from one of the hook members **4515**. This can be quite advantageous, particularly in small rooms such as dorm rooms where space is at a premium.

FIGS. **41A** and **41B** illustrate an alternative embodiment of an over-the-door hanging apparatus **4800** that includes one or more accessory hooks **4900**. Specifically, in this embodiment the bracket assembly **4600** and the accessory hooks **4900** do not couple to the same mounting plate. Rather, the bracket assembly **4600** is coupled to the rear surface **4501** of the support structure **4500** using a mounting plate **4650** that is similar to the type that has been previously described herein. However, in this embodiment the accessory hooks **4900** are not also coupled to the same mounting plate **4650**. Rather, the accessory hooks **4900** are coupled to the rear surface **4501** of the support structure **4500** using one or more accessory mounting plates **4950** that are secured to the rear surface **4501** of the support structure **4500**. The accessory mounting plate **4950** may be secured to the rear surface **4501** of the support structure **4500** in any desired manner such as hardware (i.e., screws, nails, or the like), adhesive, hook-and-loop, or the like.

In this embodiment, each of the accessory hooks **4900** comprises an arm **4901** extending from a first end **4902** to a

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second end **4903**. The accessory hook **4900** comprises a mounting element **4904** extending from the first end **4902** of the arm **4901** and a hook member **4905** extending from the second end **4903** of the arm **4901**. In the exemplified embodiment, the mounting element **4904** has a greater cross-sectional area than the arm **4901**. The accessory mounting plate **4950** comprises a receiving cavity **4951**. In the exemplified embodiment, the accessory hook **4900** is coupled to the accessory mounting plate **4950** via mechanical engagement between the mounting element **4904** of the accessory hook **4900** and the receiving cavity **4951** of the accessory mounting plate **4950**.

Specifically, in this embodiment the accessory hook **4900** is coupled to the accessory mounting plate **4950** by sliding/translating the accessory hook **4900** towards the accessory mounting plate **4950** in a direction of the longitudinal axis of the accessory hook **4900** until the mounting element **4904** of the accessory hook **4900** enters the receiving cavity **4951** of the accessory mounting plate **4950**. In the exemplified embodiment, the accessory hook **4900** is coupled to the accessory mounting plate **4950** via a frictional fit between the mounting element **4904** of the accessory hook **4900** and the receiving cavity **4951** of the accessory mounting plate **4950**. However, other techniques for coupling the accessory hook **4900** to the accessory mounting plate **4950** are possible and fall within the scope of the invention described herein.

FIGS. **40A**, **40B** and FIGS. **41A**, **41B** illustrate two alternative embodiments for coupling accessory hooks **4400**, **4900** to a support structure. However, other techniques are possible for coupling accessory hooks to a support structure. In a generic sense, the invention in accordance with this embodiment is directed to an over-the-door hanging apparatus that includes a support structure, a bracket assembly coupled to the support structure for hanging the over-the-door hanging apparatus from a door, and an accessory hook coupled to the support structure, the accessory hook having a hook member that is spaced apart from a perimetric edge of the support structure. Alternatively, the hook member of the accessory hook may be located immediately adjacent to the perimetric edge of the support structure rather than being spaced apart from the perimetric edge of the support structure so long as it remains possible to hang an item (i.e., a hat, scarf, coat, or the like) from the hook member of the accessory hook. Although the accessory hooks **4400**, **4900** are described herein as being coupled to the rear surface **4501** of the support structure **4500**, the invention is not to be so limited and the accessory hooks **4400**, **4900** may be coupled to the peripheral edge **4503** of the support structure **4500** or to the front surface **4502** of the support structure **4500** in alternative embodiments.

Referring to FIGS. **43A-43C**, an over-the-door hanging apparatus **5000** will be described in accordance with yet another embodiment of the present invention. The over-the-door hanging apparatus **5000** generally comprises a support structure **5100** having a rear surface **5101**, and a first strap **5110** and a second strap **5120** configured to be coupled to the rear surface **5101** of the support structure **5100**. The first and second straps **5110**, **5120**, when coupled to the rear surface **5101** of the support structure **5100**, are configured to wrap around at least a portion of a door to hang the support structure **5100** from the door.

As with the previously described embodiments, in the present embodiment the support structure **5100** supports a mirror **5103** at its front surface. However, the invention is not to be so limited and the support structure **5100** may support other items such as photographs, pictures, poster boards, a chalkboard, a white board, a cork board, or the like.



Thus, the support structure **5100** may support any item that is desired to be hung from a door for display and/or use.

Furthermore, as with previously described embodiments, in the present embodiment a first mounting plate **5130** and a second mounting plate **5140** are coupled to the rear surface **5101** of the support structure **5100** on opposite sides of a vertical centerline W-W of the support structure **5100**. The first and second mounting plates **5130**, **5140** may have the same structure as the mounting plates **120**, **220** previously described. Thus, the first and second mounting plates **5130**, **5140** may be placed over a channel in the rear surface **5101** of the support structure **5100** so that apertures formed into the first and second mounting plates **5130**, **5140** are aligned with the channel in the rear surface **5101** of the support structure **5100**. In the exemplified embodiment, the first and second straps **5110**, **5120** are coupled to the first and second mounting plates **5130**, **5140**, respectively. Of course, the first and second mounting plates **5130**, **5140** might not be required in all embodiments and the first and second straps **5110**, **5120** may be coupled to the rear surface **5101** of the support structure **5100** in other ways including any technique that has been described throughout this disclosure for coupling components to the rear surface of the support structure.

The first and second straps **5110**, **5120** may be formed of a resilient and/or flexible material. In the exemplified embodiment, each of the first and second straps **5110**, **5120** is formed of a textile which provides the first and second straps **5110**, **5120** with the necessary flexibility to enable them to wrap around the upper corners of a door as described herein. Of course, other materials are possible, including leather, rubber or other elastomeric materials, or other flexible material, so long as the functionality described herein is maintained. The first and second straps **5110**, **5120** are preferably formed of a material that permits the first and second straps **5110**, **5120** to be stretched and then biased back to their normal size and shape. The first and second straps **5110**, **5120** may comprise a decorative color or pattern. Specifically, the first and second straps **5110**, **5120** may comprise a textile or other material having a desired color (the first and second straps **5110**, **5120** may have the same color or a different color), or the first and second straps **5110**, **5120** may have a decorative pattern or the like thereon to create a desired aesthetic.

In the exemplified embodiment, each of the first and second straps **5110**, **5120** are in the form of a loop or ring, without specific regard to the shape of the loop or ring. Specifically, the first and second straps **5110**, **5120** may form a circular loop, an oval loop, a rectangular loop, other polygonal shaped loops, or the like so long as they form a closed loop. Depending on the flexibility of the material used to form the straps **5110**, **5120**, the straps **5110**, **5120** may not have a defined shape.

In the exemplified embodiment, a first clip **5111** is coupled to the first strap **5110** and a second clip **5121** is coupled to the second strap **5120**. The first and second clips **5111**, **5121** may be fixedly and non-movably coupled to the first and second straps **5110**, **5120**, respectively. Alternatively, the first and second clips **5112**, **5122** may be configured to move relative to the first and second straps **5110**, **5120**, respectively. This is dictated by the manner in which the first and second clips **5111**, **5121** is coupled to the first and second straps **5110**, **5120**. The first clip **5111** comprises a first mounting element **5112** and the second clip **5121** comprises a second mounting element **5122**. In the exemplified embodiment, the first mounting element **5112** comprises first and second hooks **5113a**, **5113b** and the second

mounting element **5122** comprises first and second hooks **5122a**, **5122b**. Of course, the first and second mounting elements **5112**, **5122** need not be hooks in all embodiments, but may instead be apertures that engage with hooks on the mounting plates **5130**, **5140** (in instances where the mounting plate **5130**, **5140** have hooks instead of apertures for coupling to the first and second straps **5110**, **5120**). Alternatively, the first and second mounting elements **5112**, **5122** may be any other structure configured to couple the first and second straps **5110**, **5120** to the support structure **5100**. Furthermore, in other embodiments the first and second straps **5110**, **5120** may be coupled to the support structure **5100** using other techniques, such as hook-and-loop fasteners, hardware including screws, nails, or the like, adhesive, mechanical features having interference or friction-type fits, or the like.

In this embodiment, the first mounting element **5112** of the first clip **5111** is coupled to the first mounting plate **5130** and the second mounting element **5122** of the second clip **5121** is coupled to the second mounting plate **5140**, thereby coupling the first and second straps **5110**, **5120** to the rear surface **5101** of the support structure **5100**. This is achieved in the exemplified embodiment via engagement between the hooks **5112a**, **5112b** of the first clip **5111** and the apertures/edges of the first mounting plate **5130** and the hooks **5122a**, **5122b** of the second clip **5121** and the apertures/edges of the second mounting plate **5140**. Of course, the first and second mounting plates **5130**, **5140** could be omitted and the first and second mounting elements **5112**, **5122** of the first and second clips **5111**, **5121** could be coupled directly to the rear surface **5101** of the support structure **5100** using any technique described with regard to any of the embodiments disclosed herein.

When the first and second straps **5110**, **5120** are coupled to the rear surface **5101** of the support structure **5100**, they are located on opposite sides of the vertical centerline W-W of the support structure **5100**. Once the first and second straps **5110**, **5120** are coupled to the rear surface **5101** of the support structure **5100**, the first and second straps **5110**, **5120** can then be coupled to the door **10** to hang the support structure **5100** from the door. Specifically, the first strap **5110** is made to wrap around a first upper corner **20** of the door **10** and the second strap **5120** is made to wrap around a second upper corner **21** of the door **10**.

More specifically, in the exemplified embodiment the door **10** has a top edge **22**, a bottom edge **23** opposite the top edge **22**, a first lateral edge **24**, and a second lateral edge **25** opposite the first lateral edge **24**. Each of the first and second lateral edges **24**, **25** extends between the top and bottom edges **22**. When the first and second straps **5110**, **5120** are coupled to the door **10**, the first strap **5110** wraps around the first upper corner **20** of the door **10** so that the first strap **5110** is in direct contact with the top edge **22** of the door **10** and the first lateral edge **24** of the door **10** and the second strap **5120** wraps around the second upper corner **21** of the door **10** so that the second strap **5120** is in direct contact with the top edge **22** of the door **10** and the second lateral edge **25** of the door **10**. Thus, the first upper corner **20** of the door **10** is located within the loop formed by the first strap **5110** and the second upper corner **21** of the door **10** is located within the loop formed by the second strap **5120**. The weight of the support structure **5000** in conjunction with the force of gravity maintains the over-the-door hanging apparatus **5000** in the position illustrated in FIG. **43C** when the over-the-door hanging apparatus **5000** is hung from the door **10**.

In certain embodiments, each of the first and second straps **5110**, **5120** may have a length adjustment feature **5115** that

permits adjustment of the length of material of the first and second straps **5110**, **5120**. More specifically, adjusting the length adjustment feature **5115** will change the diameter of the loop that is formed by the first and second straps **5110**, **5120**. This will permit the support structure **5100** to be hung higher on the door **10** when the diameter of the loop is decreased and lower on the door **10** when the diameter of the loop is increased. Although the length adjustment feature **5115** is only illustrated on the first strap **5110**, it may of course also be included on the second strap **5120**.

FIG. **44** illustrates an alternative embodiment of an over-the-door hanging apparatus **5200** in position coupled to the door **10**. Similar to the previous embodiment, the over-the-door hanging apparatus **5200** comprises a support structure **5210** having a rear surface, a first strap **5220** coupled to the rear surface of the support structure **5210**, and a second strap **5230** coupled to the rear surface of the support structure **5210**. Each of the first and second straps **5220**, **5230** may form a closed loop as with the previous embodiment. Alternatively, the first and second straps **5220**, **5230** may not be in the form of a closed loop, but may instead have a first end coupled to the rear surface of the support structure **5210** at a first axial location along the rear surface of the support structure **5210** and a second end coupled to the rear surface of the support structure **5220** at a second axial location along the rear surface of the support structure **5210**. The first axial location may be adjacent to the top end of the support structure **5210** and the second axial location may be adjacent to the bottom end of the support structure **5210** or it may be at any location between the first axial location and the bottom end of the support structure **5210**. In this embodiment, the first and second straps **5220**, **5230** have a length that is greater than a length of the door measured from the bottom edge **23** of the door **10** to the top edge **22** of the door **10**.

In this embodiment, the first and second straps **5220**, **5230** do not just wrap around a corner of the door, but rather they wrap around least: (1) the portion of the door that extends from a top edge **5211** of the support structure to the top edge **22** of the door **10**; (2) the entire rear surface of the door (the surface opposite the surface that is adjacent to the rear surface of the support structure **5210**); and (3) the portion of the door that extends from the bottom edge **23** of the door **10** to the bottom edge **5212** of the support structure **5210**. Thus, the first and second straps **5220**, **5230** wrap around the top edge **22** of the door **10**, the bottom edge **23** of the door **10**, and the rear surface of the door **10**. In some embodiments, depending on the length of the first and second straps **5220**, **5230** and the manner in which they are coupled to the rear surface of the support structure **5210**, the first and second straps **5220**, **5230** may wrap around an entirety of an axial circumference of the door **10**.

Due to the manner in which the first and second straps **5220**, **5230** are arranged and located, in this embodiment the support structure **5210** can move vertically and horizontally along the door **10** while remaining coupled to the door **10** as illustrated in FIG. **44**. The first and second straps **5220**, **5230** may also include a length adjustment feature as previously described with reference to the first and second straps **5110**, **5120** to enable the first and second straps **5220**, **5230** to fit around different sized doors. Furthermore, although the exemplified embodiment illustrates two straps, in some embodiments only one of the first and second straps **5220**, **5230** may be needed to hang the over-the-door hanging apparatus **5200** from the door **10**. In such an embodiment, the single strap may be located along the vertical centerline V-V of the support structure **5200** rather than being offset

therefrom as with the exemplified embodiment that uses first and second straps **5220**, **5230** located on opposite sides of the vertical centerline V-V of the support structure **5200**.

Referring to FIGS. **45-46B**, an over-the-door hanging apparatus **5300** will be described in accordance with yet another embodiment of the present invention. The over-the-door hanging apparatus **5300** generally comprises a support structure **5400** having a rear surface **5401**, a mounting plate **5450** secured to the rear surface **5401** of the support structure **5400**, and a bracket assembly **5500** detachably coupled to the rear surface **5401** of the support structure **5400**. In the exemplified embodiment, the bracket assembly **5500** is coupled to the mounting plate **5450**, but in alternative embodiments the mounting plate **5450** may be omitted and the bracket assembly **5500** may be coupled directly to the rear surface **5501** of the support structure **5500**.

In this embodiment, the mounting plate **5450** comprises a first aperture **5451** defined by a first closed-geometry edge **5452** and a second aperture **5453** defined by a second closed-geometry edge **5454**. The first and second apertures **5451**, **5453** are horizontally spaced apart from one another and vertically aligned with one another. The rear surface **5401** of the support structure **5400** may have one or more channels formed therein that are aligned with the first and second apertures **5451**, **5453** of the mounting plate **5450**. As a result, a hook or mounting element of the bracket assembly **5500** may be inserted into the apertures **5451**, **5453** of the mounting plate **5450** and into the channels in the rear surface **5401** of the support structure **5400** to couple the bracket assembly **5500** to the rear surface **5401** of the support structure **5400** in a manner similar to that which has been described above with regard to the previously described embodiments. One difference in this embodiment is that the first and second apertures **5451**, **5453** of the mounting plate **5450** are horizontally spaced apart from one another. Thus, the first and second apertures **5451**, **5453** are located on opposite sides of a vertical centerline U-U of the support structure **5400**. The first and second apertures **5451**, **5453** may be aligned with a plane that is transverse to the vertical centerline U-U. In the exemplified embodiment, the mounting plate **5450** is elongated along an axis M-M that is perpendicular to the vertical centerline U-U of the support structure **5400**.

The bracket assembly **5500** comprises a horizontal portion **5501** and a vertical portion **5520** extending from the horizontal portion **5501**. The bracket assembly **5500** further comprises first and second mounting elements **5502**, **5503**, which in the exemplified embodiment are in the form of hooks, extending from a front surface **5504** of the horizontal portion **5501** of the bracket assembly **5500**. Furthermore, the bracket assembly **5500** comprises at least one bracket **5521** extending from a rear surface **5522** of the vertical portion **5502**. The bracket **5521** is a U-shaped bracket as previously described so that the bracket **5521** may engage a top edge of a door to hang the support structure **5400** from the door.

The bracket assembly **5500** is coupled to the rear surface **5401** of the support structure **5400** via slidable engagement between the first mounting element **5502** of the bracket assembly **5500** and a portion of the first closed-geometry edge **5452** of the mounting plate **5450** and slidable engagement between the second mounting element **5503** of the bracket assembly **5500** and a portion of the second closed-geometry edge **5454** of the mounting plate **5450**. To achieve this engagement, the first mounting element **5502** is positioned within the first aperture **5451** and the second mounting element **5503** is positioned within the second aperture **5453**, and then the bracket assembly **5500** is move upwardly

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to engage the first and second mounting elements **5502**, **5503** with the first and second closed-geometry edges **5452**, **5454** of the mounting plate **5450**. As best seen in FIG. **46B**, when the bracket assembly **5500** is coupled to the support structure **5400**, the vertical portion **5520** of the bracket assembly **5500** is aligned with the vertical centerline U-U of the support structure **5400**.

In this embodiment, the bracket assembly **5500** is also illustrated with a locking feature **5530** to lock the bracket assembly **5500** to the support structure **5400** once the mounting elements **5502**, **5503** are coupled to the mounting plate **5450**. In that regard, the locking feature **5530** might be a hook that can be snapped or bent over the profile of the support structure **5400** to create a more secure connection between the bracket assembly **5500** and the support structure **5400**.

Thus, the bracket assembly **5500** works in a similar manner to the previously described bracket assemblies except that it is a single component that is located in alignment with the vertical centerline of the support structure to which it is coupled rather than having two components located on opposite sides of the vertical centerline of the support structure. This design eliminates material and might result in a cost-savings.

Referring to FIG. **46C**, the over-the-door hanging apparatus **5300** is illustrated being supported by a door **10**. The bracket **5521** engages the top edge of the door and the support structure **5400** hangs from the bracket assembly **5500**. As with the previous embodiments, in this embodiment the support structure **5400** supports a mirror **5403**, although the invention is not to be so limited and other items might be supported by the support structure **5400** such as a chalk board, a poster board, a cork board, a white board, a poster, or the like.

Referring to FIGS. **47** and **47A**, a bracket assembly **5600** for hanging an article from a door is illustrated. The bracket assembly **5600** comprises an elongate member **5610** comprising a front surface **5611** and a rear surface **5612**. A plurality of mounting elements **5620** extend from the front surface **5611** and a bracket **5630** extends from the rear surface **5612**. The bracket **5630** is configured to hang the bracket assembly **5600** from the top edge of a door as has been previously described herein. The mounting elements **5620** are configured to couple the bracket assembly **5600** to a support structure, such as a support structure that supports a mirror, a chalkboard, a poster board, a cork board, a white board, or the like.

The elongate member **5610** is similar to one of the elongate members **151** described above with reference to FIGS. **3A** and **3B** except that the structure of the mounting elements **5620** is different than the shape of the hooks **161**, **162**. The mounting elements **5620** may still be considered hooks, but they have a different shape than the hooks **161** of the embodiment described earlier in this document. Specifically, in this embodiment the mounting elements **5620** are wedge-shaped elements. The benefit of this shape is that the mounting elements **5620** will tighten the bracket assembly **5600** onto the support structure as the two are slid together. This will help create tension to better secure the support structures and the mirrors or other items that they support against wiggling and rattling.

Each of the mounting elements **5620** extends from a first end **5621** that is coupled directly to the front surface **5611** of the elongate member **5610** to a second end **5622**, the second end **5622** being spaced apart from the front surface **5611** of the elongate member **5610** and forming a free end of the mounting element **5620**. Each of the mounting elements

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**5620** is wedge-shaped such that the first end **5621** of the mounting elements **5620** that is coupled directly to the front surface **5611** of the elongate member **5610** is wider than the terminal or free end of the mounting elements **5620**. Furthermore, in some embodiments the front surface **5611** of the elongate member **5610** may lie on a plane T-T.

The mounting elements **5620** may extend from the front surface **5611** in a manner such that the distance D between the plane T-T and the mounting elements **5620** measured in a direction perpendicular to a longitudinal axis of the elongate member **5610** increases with distance from the free end of the mounting elements **5620** towards the point of connection between the mounting elements **5620** and the front surface **5611** of the elongate member **5610**. More specifically, in the exemplified embodiment the mounting elements **5620** have a first portion **5625** that includes the first end **5621** and a second portion **5626** that extends from the first portion **5625** to the second end **5622**. The first portion **5625** extends obliquely to the plane T-T in a direction away from the front surface **5611** of the elongate member **5610**. The second portion **5626** extends obliquely from the first portion **5625** in a direction back towards the front surface **5611** of the elongate member **5610**. Thus, for each of the mounting elements **5620**, the second free end **5622** is located closer to the front surface **5611** of the elongate member **5610** than the portion of the mounting elements **5620** that is located at the intersection or junction of the first and second portions **5625**, **5626**.

Referring to FIG. **48**, yet another embodiment of a bracket assembly **5700** for hanging an article from a door is illustrated. The bracket assembly **5700** comprises an elongate member **5710** having a front surface **5711** and an opposite rear surface **5712**. The bracket assembly **5700** may include more than one of the elongate members **5711** in some embodiments as should be appreciated from a full reading of this document. The bracket assembly **5710** comprises a bracket **5720** for hanging the bracket assembly **5710** from the top edge of a door and a plurality of mounting elements **5730** for coupling the bracket assembly **5710** to a support structure as has been described in detail herein.

In this embodiment, the bracket assembly **5700** is intended to be a universal bracket assembly so that it can be coupled to support structures having different coupling components, mounting plates, or the like. In that regard, the mounting elements **5730** of the bracket assembly **5700** comprises at least one hook **5731** extending from the front surface **5711** of the elongate member **5710**, at least one protuberance **5732** having a different shape than the hook **5731** extending from the front surface **5711** of the elongate member **5710**, and at least one aperture **5733** formed through the elongate member **5710**. In this embodiment there are multiple apertures **5733** and only one hook **5731** and one protuberance **5732**, but the invention is not to be so limited in all embodiments and variations in the number of apertures, protuberances, and hooks may be used in alternative embodiments.

The elongate member extends from a first end **5740** to a second end **5741** along a longitudinal axis O-O. In the exemplified embodiment, the hook **5731** is located adjacent the first end **5740** of the elongate member **5710** such that no mounting elements exist between the hook **5731** and the first end **5740** of the elongate member **5710**. Of course, the specific locations along the first elongate member **5710** at which the various hooks **5731**, protuberances **5732**, and apertures **5733** are located may be modified from that which is shown in FIG. **48**.

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Referring to FIGS. 49A-49C, another embodiment of an over-the-door hanging apparatus 5800 will be described. The over-the-door hanging apparatus 5800 generally comprises a support structure 5810 having a rear surface 5811 and a bracket assembly 5850 configured to hang the support structure 5810 from the top edge of a door. The support structure 5810 may support a mirror, chalkboard, poster board, cork board, white board, or the like as previously described. In this embodiment, the bracket assembly 5850 comprises at least one elongate member 5860 having at least one mounting element 5851 for coupling the bracket assembly 5850 to the rear surface 5811 of the support structure 5810 and at least one bracket 5852 configured to engage the top edge of the door. Although only a single elongate member 5860 is depicted, it should be appreciated that two of the elongate members 5860 are preferably included in the bracket assembly 5850 as with the previously described embodiments. In such an embodiment each of the elongate members 5860 has at least one mounting element 5851 and at least one bracket 5852. In this manner, the elongate members 5860 are coupled to the rear surface 5811 of the support structure 5810 on opposite sides of a vertical centerline P-P of the support structure 5810.

Thus, the bracket assembly 5850 has a similar structure to the bracket assembly 150 described previously with specific reference to FIGS. 1-6 and the elongate members 5860 have a similar structure to the elongate members 151, 251 previously described with reference to FIGS. 1-6. The elongate member 5860 extends from a first end 5861 to a second end 5862. In the exemplified embodiment, there is only one mounting element 5851 and it is located at the first end 5861 of the elongate member 5860 while the bracket 5852 is located at the second end 5862 of the elongate member 5860. However, the invention is not to be so limited in all embodiments and there could be additional mounting elements positioned along the elongate member 5860. In some embodiments, the elongate member 5860 may have an identical structure to the elongate members 151, 251. In the exemplified embodiment, the at least one mounting element 5851 is a hook and the at least one bracket 5852 is a U-shaped member.

The main difference in this embodiment is that there is no plate secured to the rear surface 5811 of the support structure 5810. Instead, at least one groove 5812 is formed directly into the rear surface 5811 of the support structure 5810. In the exemplified embodiment, there are eight grooves 5812 located on the first side of the vertical centerline P-P and eight grooves 5812 located on the second side of the vertical centerline P-P (only six of the eight grooves 5812 on the second side of the vertical centerline P-P are visible in the view provided in FIG. 49A). Of course, more or less than eight grooves may be used in other embodiments. For example, the spacing between the grooves may be modified relative to that which is shown in the exemplified embodiment. Furthermore, the grooves 5812 may be formed into the rear surface 5811 of the support structure 5810 along the entire length of the support structure 5810 in some embodiments or along only a portion of the length of the support structure 5810 in other embodiments.

Each of the grooves 5812 extends from an opening 5813 in the rear surface 5811 of the support structure 5810 to a floor 5814. Furthermore, each of the grooves 5812 extends along a groove axis G-G that is oblique to the rear surface 5811 of the support structure 5810. As a result of the angle at which the grooves 5812 are formed into the rear surface 5811 of the support structure 5810, the floor 5814 of each groove 5812 is located closer to a top edge 5815 of the

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support structure 5810 than the opening 5813 of that groove 5812. Thus, the grooves 5812 are angled upwardly towards the top edge 5815 of the support structure 5810 with increasing distance from the opening 5813 to the floor 5814. Stated another way, the groove axis G-G gets closer to the top edge 5815 of the support structure 5810 the further it extends from the rear surface 5811 of the support structure towards the front surface of the support structure 5810.

Referring to FIG. 49C, when the bracket assembly 5850 is coupled to the support structure 5810, the at least one mounting element 5851 of the bracket assembly 5850 nests within the at least one groove 5812. Because there are multiple grooves 5812 and a single mounting element 5851 in the exemplified embodiment, the bracket assembly 5850 may be coupled to the support structure 5810 at different locations by inserting the mounting element 5851 into different ones of the grooves 5812. This can be done to adjust the hanging height of the support structure 5810 when it is hung from a door using the bracket assembly 5850.

In the assembled state, the support structure 5810 hangs from the mounting element 5851 of the bracket assembly 5850. Furthermore, the bracket 5852 of the bracket assembly 5850 may slidably engage the top edge of a door to hang the support structure 5810 from the door. Thus, with the bracket 5852 positioned over the top edge of a door and the mounting element 5851 of the bracket assembly 5850 nesting within one of the grooves 5812 of the support structure 5810, the support structure 5810 is supported by or hung from the door.

As noted above, in certain embodiments the bracket assembly 5850 comprises two of the elongate members 5860 each having a bracket 5852 and at least one mounting element 5851. Furthermore, the support structure 5810 may comprise a first set of grooves 5812 located on a first side of the longitudinal centerline P-P and a second set of grooves 5812 located on a second side of the longitudinal centerline P-P. A first one of the elongate members 5860 may have its at least one mounting element 5851 nest within one of the first set of grooves 5812 and a second one of the elongate members 5860 may have its at least one mounting element 5851 nest within one of the second set of grooves 5812 while the brackets 5852 of both of the first and second ones of the elongate members 5860 engage the top edge of the door.

In the embodiment of FIGS. 49A-49C, the grooves 5812 are located on the rear surface 5811 of the support structure 5810 along the oppositely positioned vertical edges 5817 of the rear surface 5811 of the support structure 5810. Thus, there is an opening into the grooves 5812 located along a peripheral edge 5816 of the support structure 5810. However, as shown in FIG. 50 this is not required in all embodiments and in an alternative embodiment the grooves 5912 may be inwardly offset from the vertical edges 5917 of the rear surface 5911 of the support structure 5910. This alternative embodiment may be better served to ensure that the mounting elements 5851 do not become accidentally disengaged or un-nested from the grooves 5912 once the over-the-door hanging apparatus is fully assembled and coupled to or hanging from a door.

FIG. 51 illustrates an alternative embodiment of a support structure 6000 that can be hung from a door using a bracket assembly comprising a pair of elongate members such as those depicted in FIGS. 18A and 18B. Again, in this embodiment there is no mounting plate secured to a rear surface 6001 of the support structure 6000. Rather, in this embodiment there is at least one multi-width slot 6110 formed into the rear surface 6001 of the support structure 6000. More specifically, in the exemplified embodiment the support

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structure **6000** has a vertical centerline N-N, a first set of multi-width slots **6110** formed into the rear surface **6001** of the support structure **6000** on a first side of the vertical centerline N-N and a second set of multi-width slots **6111** formed into the rear surface **6001** of the support structure **6000** on a second side of the vertical centerline N-N.

As noted above, the bracket assembly may include two of the elongate members **851A** described above with regard to FIGS. **18A** and **18B**. In that regard, the at least one mounting element of the bracket assembly may comprise hooks or flanged fasteners that are configured to engage with the multi-width slots **6110** to couple the bracket assembly to the support structure **6000**. Specifically, the mounting element of the bracket assembly (i.e., one of the flanged fasteners or hooks **881-883**) may nest within one of the multi-width slots **6110**, **6111** to couple the bracket assembly to the support structure **6000**. The bracket assembly preferably includes two of the elongate members **851A** such that the mounting element of one of the elongate members **851A** nests within one of the multi-width slots **6110** while the mounting element of the other one of the elongate members **851A** nests within one of the multi-width slots **6111**. Furthermore, a bracket of the bracket assembly will engage a top edge of a door to hang the support structure **6000** from the door as has been described herein with reference to the embodiments previously described.

FIGS. **52-58** illustrate a hanging apparatus **6100** in accordance with another embodiment of the present invention. The hanging apparatus **6100** is similar to the over-the-door hanging apparatus **4700** depicted in FIGS. **40B** and **42** and similar features will be readily recognized. Furthermore, there is a great deal of overlap between the hanging apparatus **6100** of FIGS. **52-58** and the over-the-door hanging apparatuses that have been described previously in this application, and thus certain features of the hanging apparatus **6100** will not be described in great detail herein, it being understood that the description of the previously embodiments above is applicable. For example, the manner in which the bracket assembly is coupled to the support structure will not be described in great detail with regard to this particular embodiment because this is similar in this embodiment as in those previously described. The hanging apparatus **6100** may be an over-the-door hanging apparatus in some embodiments, although this is not required in all embodiments and the hanging apparatus **6100** may be intended for hanging from a wall or door without being over-the-door in other embodiments.

Referring to FIG. **52**, the hanging apparatus **6100** comprises a support structure **6110**, a bracket assembly **6120**, and first, second, and third accessory units **6130**, **6160**, **6200**. In the exemplified embodiment, the support structure **6110** and the bracket assembly **6120** are the same as those that have been described previously, and thus a detailed description of those components is not being provided here in the interest of brevity. However, the invention is not to be so limited in all embodiments and in other embodiments the bracket assembly **6120** may take on other structural forms, such as being a standard wire hanger, a sawtooth hanger, an aperture, or any other structure that may facilitate the hanging of the support structure **6100** from a surface such as a wall or a door.

In embodiments whereby the bracket assembly **6120** that is identical to the bracket assemblies described above is used, the above description is applicable for the manner in which the bracket assembly **6120** is coupled to the support structure **6110** and can be used to hang the support structure from a door. Briefly, the support structure **6110** comprises a

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front surface **6111**, a rear surface **6112** opposite the front surface **6111**, and a perimetric edge (also referred to as an outer edge) **6113** extending between the front and rear surfaces **6111**, **6112**. The perimetric edge **6113** forms an outer boundary of the support structure **6110** and generally defines the shape of the support structure **6110**. The support structure **6110** may be a rigid structure in some embodiments, although this is not required in all embodiments.

The perimetric edge **6113** of the support structure **6110** may comprise a bottom edge **6114**, a top edge **6115** opposite the bottom edge **6114**, a first lateral edge **6116**, and a second lateral edge **6117** opposite the first lateral edge **6116** with each of the first and second lateral edges **6116**, **6117** extending between the bottom and top edges **6114**, **6115**. The support structure **6110** comprises a longitudinal axis Q-Q that extends between and intersects the bottom and top edges **6114**, **6115**. In the exemplified embodiment the support structure **6110** has a square or rectangular shape. Of course, the invention is not to be so limited in all embodiments and the support structure **6110** may be a circular shape or a polygonal shape that is not square/rectangular.

Furthermore, the support structure **6110** may support an item **6199** that is desired to be displayed in a particular location. The item **6199** may be coupled to the support structure **6110** using fasteners, adhesive, tape, glue, hook-and-loop, mechanical fasteners, hardware, locking tabs, mechanical interaction, or in any other manner. In the exemplified embodiment, the item **6199** is a mirror that is supported by the support structure **6110** so as to be exposed at the front surface **6111** of the support structure **6110**. However, the item **6199** need not be a mirror in all embodiments and could be a chalkboard, a white board, a cork board, or any other item that is desired to be displayed in the manner described herein. In some embodiments the item **6199** may be a photograph, a poster, or the like that is intended for display via hanging the support structure **6110** on a wall or a door.

In the exemplified embodiment, the hanging apparatus **6100** also comprises a bracket assembly **6120** detachably coupled to the support structure **6110**. In the exemplified embodiment, the bracket assembly **6120** is identical to the bracket assembly **150** described above with reference to FIGS. **1-11**. Thus, the bracket assembly **6120** is configured to be detachably coupled to the support structure **6110** and the bracket assembly **6120** is configured to engage a top edge of a door to hang the support structure **6110** from the door. However, the invention is not to be so limited in all embodiments. Specifically, in this embodiment the invention is not necessarily limited to the manner in which the bracket assembly **6120** is coupled to the support structure **6110** or in the manner in which the bracket assembly **6120** hangs or supports the support structure **6110** from a surface. Thus, although the use of mounting plates on the support structure **6110** as mounting elements that interact with mounting elements of the bracket assembly has been previously described, this is not required in all embodiments and variations to these techniques may be used as would be appreciated by persons skilled in the art.

Furthermore, in some embodiments the bracket assembly **6120** may be non-detachably coupled to the support structure **6110**. Moreover, although in the exemplified embodiment the bracket assembly **6120** comprises two elongate bracket members **6121**, **6122** that are identical to the elongate bracket members **151** previously described, the invention is not to be so limited in all embodiments. The bracket assembly **6120** may be configured to hang the support structure **6110** from a wall rather than from a door, or the

bracket assembly **6120** may be configured to hang the support structure **6110** from a wall without requiring the bracket assembly **6120** to engage the top edge of the door. Thus, in some embodiments the bracket assembly may be a standard wall hanging bracket assembly, such as a sawtooth hanger, a wire, or the like commonly found on picture frames that are configured to be hung from a wall by a screw, a nail, or the like. Thus, although referred to as a hanging apparatus **6100**, in some embodiments it may just be an apparatus without there being a requirement that it be configured to hang from a door.

In addition to the above features, the hanging apparatus **6100** also comprises at least one accessory unit that is detachably coupled to the support structure **6300**. In the exemplified embodiment, the at least one accessory unit comprises a first accessory unit **6130**, a second accessory unit **6160**, and a third accessory unit **6200**. In the exemplified embodiment, each of the first, second, and third accessory units **6130**, **6160**, **6200** are separate components from one another, from the support structure **6110**, and from the bracket assembly **6120** such that each of the first, second, and third accessory units **6130**, **6160**, **6200** is separately detachably coupled to the support structure **6110**. Although FIG. **52** illustrates each of the first, second, and third accessory units **6130**, **6160**, **6200** coupled to the support structure **6100**, any of one or more of the first, second, and third accessory units **6130**, **6160**, **6200** may be coupled to the support structure **6100** at any given time. Thus, depending on space constraints or desired use, the end-user can detachably couple just the third accessory unit **6200** to the support structure **6110** but not the first and second accessory units **6130**, **6160**, or the end-user may detachably couple just the first and second accessory units **6130**, **6160** to the support structure **6110** but not the third accessory unit **6200**, or the end-user may detachably couple the first and third accessory units **6130**, **6200** to the support structure **6110** but not the second accessory unit **6160**, or the second and third accessory units **6160**, **6200** to the support structure **6110** but not the first accessory unit **6130**.

Referring to FIGS. **52** and **53**, the first accessory unit **6130** will be described in greater detail. In the exemplified embodiment, the second accessory unit **6160** is identical to the first accessory unit **6130** except with regard to the configuration of its mounting elements, which merely aids in ensuring that the first accessory unit **6130** is configured to be attached to the support structure **6100** on one side of the longitudinal axis Q-Q while the second accessory unit **6160** is configured to be attached to the support structure **6100** on the other side of the longitudinal axis Q-Q, as shown in FIG. **52**. Thus, only the first accessory unit **6130** will be described herein, it being understood that the second accessory unit **6160** has the same features and is basically identical.

The first accessory unit **6130** is elongated along an axis R-R such that when the first accessory unit **6130** is coupled to the support structure **6100**, the axis R-R is parallel to the longitudinal axis Q-Q. The first accessory unit **6130** comprises a mesh portion **6131** and a plurality of hooks **6132** for holding and/or storing personal items of a user, and at least one mounting element **6133** for coupling the first accessory unit **613** to the support structure **6100**. In the exemplified embodiment, the first accessory unit **6130** is a monolithic component. However, the invention is not to be so limited in all embodiments and the first accessory unit **6130** could comprise multiple components that are coupled together in other embodiments. In the exemplified embodiment, the first accessory unit **6130** is formed from metal, although plastic and other rigid materials could also be suitable.

In the exemplified embodiment, the mesh portion **6131** of the first accessory unit **6130** is a wire mesh that comprises a first set of parallel strands **6134** and a second set of parallel strands **6135**, the second set of parallel strands **6135** being orthogonal to the first set of parallel strands **6134**. Thus, a plurality of openings **6136** are formed in the spaces between the first and second sets of parallel strands **6134**, **6135**. However, it should be appreciated that the invention is not to be so limited in all embodiments. Specifically, the mesh portion **6131** need not be a wire mesh in all embodiments and it should not be limited to being of such a structure. In other embodiments, the mesh portion **6131** of the first accessory unit **6130** could be formed from a fabric, a screen, or the like that is attached to a support portion of the first accessory unit **6130**. In other embodiments, the mesh portion **6131** may be formed from fibers that extend in a desired pattern to facilitate the coupling of personal effects thereto. The mesh portion **6131** may in some embodiments be any structure configured to hold or store personal effects of a user. For example, a user may store earrings on the mesh portion **6131** of the first accessory unit **6130**. In some embodiments, the mesh portion **6131** may be formed of metal and the user may secure items to the mesh portion **6131** using a magnet.

In some alternative embodiments, the mesh portion **6131** may be replaced with a different structure, such as ornamental features or features that extend horizontally to support a personal effect or other user item. Thus, the invention is not limited to the first accessory unit **6130** comprising the mesh portion **6131** unless specifically claimed as such.

In the exemplified embodiment, the mesh portion **6131** comprises a first edge **6137** and a second edge **6138**. When the first accessory unit **6130** is coupled to the support structure **6110** as shown in FIG. **52**, the first edge **6137** of the mesh portion **6131** is adjacent to and extends in the same direction as the first lateral edge **6116** of the support structure **6110** and the second edge **6138** of the mesh portion **6131** is spaced apart from the first lateral edge **6116** of the support structure **6110**. Furthermore, in the exemplified embodiment each of the plurality of hooks **6132** extends from the second edge **6138** of the mesh portion **6131**. Of course, the hooks **6132** could extend along the first edge **6137** of the mesh portion **6131** instead in other embodiments. In the exemplified embodiment, the hooks **6132** are positioned in a vertically or axially spaced apart manner along the second edge **6138** of the mesh portion.

The hooks **6132** may extend in a direction that is away from the front surface of the first accessory unit **6130**, in a direction that is away from the rear surface of the accessory unit **6130**, or in a direction that is away from the second edge **6138** of the mesh portion **6132** of the first accessory unit **6130**. In the exemplified embodiment, there are five of the hooks **6132**, although more or less than five hooks could be used in various embodiments. When assembled with the first accessory unit **6130** coupled to the support structure **6110**, the mesh portion **6131** is located between the hooks **6132** and the support structure **6110** in the exemplified embodiment. Of course, other arrangements may be possible in alternative embodiments, such as the hooks **6132** being located between the mesh portion **6131** and the support structure **6110**.

As mentioned above, the first accessory unit **6130** comprises a mounting element **6133** for detachably coupling the first accessory unit **6130** to the support structure **6100**. In the exemplified embodiment, the mounting element **6133** comprises a mounting plate **6140** and one or more hook members **6141** protruding from the mounting plate **6140** and config-

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ured to engage a mounting element of the support structure 6110. In the exemplified embodiment, there are two of the mounting elements 6133, although in other embodiments just one of the mounting elements 6133 may be used. Moreover, the particular structure of the mounting elements 6133 provided in the drawings is merely exemplary in nature and is not intended to be limiting of the invention in all embodiments. In other embodiments, the mounting elements 6133 may be clips, clamps, barbs, threaded members, mechanical features, or the like that can couple the first accessory unit 6130 to the support structure 6110. As noted above, the second accessory unit 6160 may be a similar or identical structure to the first accessory unit 6130 with the only differences being those that enable the second accessory unit 6160 to be coupled to the support structure 6110 adjacent its second lateral edge 6117 rather than adjacent its first lateral edge 6116 if such a difference is necessary for such purpose.

Referring to FIGS. 52 and 54, the third accessory unit 6200 will be described. The third accessory unit 6200 comprises a plurality of hooks 6201 and at least one mounting element 6202 for mounting the third accessory unit 6200 to the support structure 6110. The plurality of hooks 6201 extend from a horizontal bar 6203 that is located adjacent to the bottom edge 6114 of the support structure 6110 when the third accessory unit 6200 is coupled to the support structure 6110. In the exemplified embodiment, there are ten of the hooks 6201 positioned in a spaced apart manner along the horizontal bar 6203, although more or less than ten of the hooks 6201 may be included in various alternative embodiments.

In the exemplified embodiment, there are two of the mounting elements 6202, one on either end of the horizontal bar 6203, although a single mounting element 6202 or more than two mounting elements 6202 could be used in other embodiments. In the exemplified embodiment, each of the mounting elements 6202 comprises a mounting plate 6204 and a hook member 6205. Of course, other features such as any of those described herein can be used in place of the mounting elements 6202 in other embodiments so long as the third accessory unit 6200 is configured for detachable coupling to the support structure 6100. As will be described in greater detail below with reference to FIG. 56, the mounting elements 6202 interact with mounting elements on the support structure 6110 to facilitate coupling of the third accessory unit 6200 to the support structure 6110.

FIG. 55 illustrates the first, second, and third accessory units 6130, 6160, 6200 oriented as they would be when coupled to the support structure 6110, although the support structure is not shown in FIG. 55. As can be seen, the first and second accessory units 6130, 6160 are elongated in a similar direction whereas the third accessory unit 6200 is elongated in a direction orthogonal to the first and second accessory units 6130, 6160. When the hanging apparatus 6100 is fully assembled, the first and second accessory units 6130, 6160 are adjacent to the first and second lateral sides 6116, 6117 of the support structure 6110 and the third accessory unit 6200 is adjacent to the bottom edge 6114 of the support structure 6110. Of course, each of the first, second, and third accessory units 6130, 6160, 6200 may be coupled to and decoupled from the support structure 6110 as desired so all of the accessory units 6130, 6160, 6200 need not be coupled to the support structure 6110 at the same time (although this is possible).

FIG. 56 illustrates the coupling of the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 to the support structure 6110. Thus, in FIG. 56

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the rear surface 6112 of the support structure 6110 is depicted. In this embodiment, there are a plurality of mounting elements on the rear surface 6112 of the support structure 6110 configured to mate/interact with the mounting elements of the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 so all can be detachably coupled to the support structure 6110. In the exemplified embodiment, there are several mounting plates 6210 on the rear surface 6112 of the support structure 6110, with each of the mounting plates 6210 having one or more apertures therein that is aligned with a recess or opening in the rear surface 6112 of the support structure 6110.

Thus, the first and second accessory units 6130, 6160 can be detachably coupled to the support structure 6110 by inserting one or more of the hook members 6141 into the apertures in the mounting plates 6210 and sliding the accessory units 6130, 6160 downwardly relative to the support structure 6100. Similarly, the third accessory unit 6200 can be detachably coupled to the support structure 6110 by inserting the hook members 6205 into the apertures in the mounting plates 6210 and sliding the accessory unit 6200 downwardly relative to the support structure 6100. Of course, this is merely one embodiment, and other features may be used to facilitate the coupling between the first, second, and third accessory units 6130, 6160, 6200 and the support structure 6110. In the exemplified embodiment, there are enough mounting plate apertures on the rear surface 6112 of the support structure 6110 to enable all of the mounting elements 6141, 6205 of each of the first, second, and third accessory units 6130, 6160, 6200 and the mounting elements of the bracket assembly 6120 to be coupled to the support structure 6110 at the same time. Of course, FIG. 56 provides only one example of the manner in which the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 may be coupled to the support structure 6110. Any other techniques described herein may be used to couple the first, second, and third accessory units 6130, 6160, 6200 to the support structure 6110, such as the various techniques described herein for coupling the bracket assemblies to the support structures, and still fall within the scope of the invention described herein.

FIG. 57 illustrates a front view of the hanging apparatus 6100 with the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 coupled to the support structure 6110. The mounting elements of the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 are not visible because they are located on the rear surface 6112 of the support structure 6110. Thus, the bracket assembly 6120 and the first, second, and third accessory units 6130, 6160, 6200 may in some embodiments be coupled to the rear surface 6112 of the support structure 6110, although this is not required in all embodiments.

The first accessory unit 6130 is coupled to the support structure 6110 and positioned adjacent to and/or along the first lateral edge 6116 of the support structure 6110. Thus, the mesh portion 6131 of the first accessory unit 6130 is adjacent to and extends along the first lateral edge 6116 of the support structure 6110. The hooks 6132 of the first accessory unit 6130 then extend from the mesh portion 6131 in a direction away from the first lateral edge 6116 of the support structure 6110. The second accessory unit 6160 is coupled to the support structure and positioned adjacent to and/or along the second lateral edge 6117 of the support structure 6110. Thus, the mesh portion 6161 of the second accessory unit 6160 is adjacent to and extends along the



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second lateral edge 6117 of the support structure 6110. The hooks 6162 of the second accessory unit 6160 then extend from the mesh portion 6161 in a direction away from the second lateral edge 6117. The third accessory unit 6200 is coupled to the support structure 6110 and positioned adjacent to and/or along the bottom edge 6114 of the support structure 6110. The horizontal bar 6203 extends along the bottom edge 6114 and the hooks 6201 extend from the horizontal bar 6203 in a direction of the front surface 6111 of the support structure 6110.

In the exemplified embodiment, the first and second accessory units 6130, 6160 have a height that is less than a height of the support structure 6110. Thus, in the exemplified embodiment the first and second accessory units 6130, 6160 do not extend along the entirety of the first and second lateral sides 6116, 6117 of the support structure 6110. However, the invention is not to be so limited in all embodiments and the length/height of the first and second accessory units 6130, 6160 may be modified as desired. Similarly, the length of the third accessory unit 6200 may be modified to be greater or less than that which is depicted in the exemplified embodiment relative to the width of the support structure 6110.

Referring to FIG. 58, the hanging apparatus 6100 is illustrated hanging from a top edge of a door by the bracket assembly 6120. A user can hang various items or personal effects from the hooks 6132, 6162, 6201 of the first, second, and third accessory units 6130, 6160, 6200. For example, hats, glasses, sunglasses, jewelry, scarves, jackets, backpacks, purses, handbags, or the like may be hung from the hooks 6132, 6162, 6201. Furthermore, a user may use the mesh portions 6131, 6161 of the first and second accessory units 6130, 6160 to hold or store other personal effects, such as earrings or other jewelry.

FIGS. 59A and 59B illustrate an over-the-door hanging apparatus 6800 in accordance with yet another embodiment of the present invention. The over-the-door hanging apparatus 6800 generally comprises a frame 6801, a flat article 6810 supported within the frame 6801, first and second mounting plates 6820, 6830 secured to a rear surface 6803 of the frame 801, a corner plate 6840 secured to the rear surface 6803 of the frame 6801, and a bracket assembly to which the frame 6801 is slidably mounted (the bracket assembly 150 described above can be used as the bracket assembly in this embodiment, although it is not separately illustrated herein with regard to the over-the-door hanging apparatus 6800 in the interest of brevity). The frame 6801 has a front surface 6802 and the rear surface 6803. The front surface 6802 defines a display opening through which the flat article 6810 can be viewed. In certain preferred embodiments, the flat article 6810 is a mirror. However, the flat article 6810 can be any other article that is desired to be displayed within the frame 6801 and particularly one that is desired to be hung from a door.

In this embodiment, the frame 6801 is preferably formed from aluminum or another metal. For example, the frame 6801 could be formed from an extrusion process out of aluminum or another metal or metal-like material. The construction of the frame 6801 may be one-piece construction in some embodiments, although the invention is not to be so limited and each linear section of the frame 6801 could be separately formed and then later connected together to form the frame 6801 in other embodiments.

FIG. 60 depicts a rear view of the over-the-door hanging apparatus 6800 showing the rear surface 6803 of the frame 6801 and the first and second mounting plates 6820, 6830 and the corner plate 6840 secured to the rear surface 6803 of the frame 6801. In this particular embodiment, there is one

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corner plate 6840 located along one corner of the rear surface 6803 of the frame 6801 and there are two of the mounting plates 6820, 6830 positioned along two opposing sides of the rear surface 6803 of the frame 6801 on opposite sides of the longitudinal axis of the frame 6801. In other embodiments, one of the corner plates 6840 may be positioned along each of the four corners of the rear surface 6803 of the frame 6801. In still other embodiments, the corner plates 6840 may be positioned along two or three of the four corners of the rear surface 6803 of the frame 6801. The corner plates 6840 provide stability to the frame 6801 by spanning across and being coupled directly to (with a fastener such as a screw as shown) two adjacent and perpendicularly oriented sides/sections of the frame 6801, thereby securing the linear sections of the frame 6801 together. The mounting plates 6820 can be used in a similar manner to the mounting plates described previously in this document along with the bracket assemblies 150 to hang the frame 6801 from the top of a door. In various different embodiments, the mounting plate 6820 may be positioned at different positions or heights along the two opposing sides on which they are located. However, the mounting plates 6820 should be aligned with one another (positioned at the same elevation/height along the sides) to ensure that they can be used to hang the frame 6801 in an even manner.

FIG. 61 is a close-up view of one of the corners of the frame 6801 with the first mounting plate 6820 coupled thereto. The rear surface 6803 of the frame 6801 comprises a channel 6805 and the first mounting plate 6820 is located within the channel 6805. The channel 6805 is defined by a floor, sidewalls extending from opposite sides of the floor, and a flange or lip extending inwardly towards each other at distal ends of the sidewalls (described further below with reference to FIG. 64). The flange or lip ensures that the first and second mounting plates 6820, 6830 are maintained in the channel 6805. Furthermore, the first and second mounting plates 6820, 6830 may be secured to the frame 6805 with a fastener such as a screw (also shown in FIG. 64). The second mounting plate 6830 is located within the channel 6805 on the opposite side of a longitudinal centerline of the frame 6801, although this is not shown in FIG. 61. As seen in FIG. 61, the entirety of the mounting plate 6820 nests within the channel 6805 in this embodiment. Specifically, the flange or lip of the frame 6801 overlies the exposed surface of the mounting plate 6820 to hold the mounting plate 6820 in the channel 6805.

The first mounting plate 6820 and the second mounting plate 6830 are identical. Thus, while the first mounting plate 6820 will be described, it should be appreciated that the details provided for the first mounting plate 6820 are also applicable for the second mounting plate 6830. The first mounting plate 6820 is a flat plate having a flat or planar front surface and a flat or planar rear surface. The first mounting plate 6820 comprises a first mounting element 6821, which, in the exemplified embodiment, is in the form of an aperture or opening, a second mounting element 6822, which, in the exemplified embodiment, is in the form of an aperture or opening, and a connection element 6823 in the form of an aperture or opening. In the exemplified embodiment, the first and second mounting elements 6821, 6822 are rectangular-shaped openings formed through the first mounting plate 6820. The first and second mounting elements 6821, 6822 are intended to receive the hooks of the bracket assembly 150 (i.e., the hooks 161, 162 as shown in FIGS. 3A and 3B) for mounting the frame 6801 to the bracket assembly 150.



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However, the invention is not to be so limited in all embodiments. Thus, for example, the first and second mounting elements **6821**, **6822** may be protrusions in other embodiments that mate with openings in the bracket assembly **150** while achieving the same result of coupling the bracket assembly **150** to the mounting plates **6820**, **6830**. Other engaging or corresponding features may be used as the mounting elements of the bracket assembly **150** and the mounting elements **6821**, **6822** of the first mounting plate **6820** (and the second mounting plate **6830**). This could include adhesives, hook-and-loop fasteners, notch/protrusion engagement, or the like.

As noted above, the first mounting plate **6820** also comprises the connection element **6823**. In the exemplified embodiment, the connection element **6823** is an opening or aperture formed through the first mounting plate **6820**. The connection element **6823** is configured to receive a screw **6824** to secure the first mounting plate **6820** to the frame **6801**. In the exemplified embodiment, there is one connection element/aperture **6823** in the first mounting plate **6820**. In other embodiments, multiple connection elements/apertures **6823** could be provided in the mounting plate **6820** to ensure that the mounting plate **6820** is securely coupled to the frame **6801**.

FIG. **62** illustrates a close-up view showing the corner plate **6840** mounted within the channel **6805** of the frame **6801** along one of the corners of the frame **6801**. The corner plate **6840** is an L-shaped plate that assists in coupling together two sections of the frame **6801** that are oriented perpendicularly to one another. Specifically, the frame **6801** may be formed from four (or more than four or in some embodiments three) separate sections or components that are coupled together. The corner plate **6840** can help to hold the separate sections of the frame **6801** together by coupling the corner plate **6840** to two different sections of the frame **6801** with screws as shown in FIG. **62**.

FIG. **63** is a cross-sectional view taken along line LXIII-LXIII of FIG. **60** and FIG. **64** is a close-up view of area LXIV of FIG. **63**. FIGS. **63** and **64** show how the screw **6824** may be used to couple the first mounting element **6820** to the frame **6801**. As mentioned above, the channel **6805** is defined by a floor **6806**, a first sidewall **6807** on a first side of the floor **6806**, and a second sidewall **6808** on a second side of the floor **6806**. Furthermore, a flange **6809** extends from the first sidewall **6807** inwardly towards the second sidewall **6808** and a second flange **6810** extends from the second sidewall **6808** inwardly towards the first sidewall **6807**. The first mounting plate **6820** nests within the channel **6805** between the flanges **6809**, **6810** and the floor **6806**. The screw or other fastener **6824** extends through the apertures **6823** in the first mounting plate **6820** and then through an opening in the floor **6806** of the channel **6805** to secure the first mounting plate **6820** to the frame **6801**. Notably, although not shown herein, the second mounting plate **6830** is secured to the frame **6801** in the same way. FIGS. **63** and **64** also illustrate how, in this embodiment, the first mounting plate **6820** has a planar top and bottom surface, although the invention is not to be so limited in all embodiments as described below with reference to FIGS. **67** and **68**.

FIGS. **63** and **64** also depict the rabbet **6815** of the frame **6801**. The mirror or other item that is intended to be displayed (not shown in FIGS. **63** and **64**) is positioned within the rabbet **6815** and rests atop of a floor **6817** of the rabbet **6815**. The rabbet **6815** is the space defined between the floor **6817** of the rabbet **6815** and the floor **6806** of the

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channel **6805**. The mirror or other item is displayed and visible through a display opening **6816** on the front surface **6802** of the frame **6801**.

FIGS. **65** and **66** are three-dimensional renderings of portions of the over-the-door hanging apparatus **6800** that illustrate a portion of the frame **6801** and the first mounting plate **6820** coupled thereto. Referring to FIGS. **64** and **66** in particular, the first mounting plate **6820** comprises a front surface **6826** and a rear surface **6827** opposite the front surface **6826**. Furthermore, the channel **6805** comprises the floor **6806**. The first mounting plate **6820** is positioned in the channel **6805** so that the rear surface **6827** of the first mounting plate **6820** is spaced apart from the floor **6806** of the channel **6805**. Thus, there is a space between the rear surface **6827** of the mounting plate **6820** and the floor **6806** of the channel **6805** within which the hooks or other mounting elements of the bracket assembly (such as the bracket assembly **150**) can nest when the bracket assembly **150** is mounted or otherwise coupled to the frame **6801** via the first and second mounting plates **6820**, **6830**.

FIG. **67** illustrates an over-the-door hanging apparatus **6900** in accordance with another embodiment. The over-the-door hanging apparatus **6900** is identical to the over-the-door hanging apparatus **6800** except that it includes a different type of mounting bracket **6920**. Thus, the over-the-door hanging apparatus **6900** includes the aluminum or metal frame with the channel **6905**, but the configuration and structure of the mounting brackets **6920** is modified from that which was shown and described in the previous embodiment of the over-the-door hanging apparatus **6800**. In FIG. **67** only one mounting bracket **6920** is depicted, but it should be appreciated that there would be an identical one on the opposite side of the frame **6901**. There is also a corner bracket **6940** coupled to the frame **6901** in this embodiment, as shown.

Referring to FIGS. **67** and **68**, the mounting bracket **6920** will be described in greater detail. The mounting bracket **6920** comprises a plurality of first portions **6921** that are configured for coupling the mounting bracket **6920** to the frame **6901** and a plurality of second portions **6922** that are configured for coupling the mounting bracket **6920** to the bracket assembly **150** (i.e., to the first and second elongate members **151**, **251** of the bracket assembly **150**).

The first portions **6921** of the mounting bracket **6920** comprise holes through which fasteners **6990** can be disposed for purposes of coupling the mounting bracket **6920** to the frame **6901**. Thus, the fasteners **6990** extend through the holes in the first portions **6921** of the mounting bracket **6920** and into holes in the floor of the channel **6905** similar to the manner in which the mounting brackets **6820** are coupled to the frame **6801** as described above.

The second portions **6922** of the mounting bracket **6920** comprise mounting elements **6923**, which in the exemplified embodiment are openings that are configured to receive the hooks of the bracket assembly **150** for coupling the bracket assembly **150** to the mounting bracket **6920** which is in turn coupled to the frame **6901**. Of course, as has been described above, the mounting elements **6923** could be modified to be protrusions, adhesives, hook-and-loop, or other structures or components so long as they are configured to mate with or engage the bracket assembly **150** for purposes of coupling the bracket assembly to the mounting brackets **6920**.

In the exemplified embodiment, mounting element **6923** of one of the second portions **6922** of the mounting bracket **6920** has a different shape than the mounting element **6923** of the other one of the second portions **6922** of the mounting bracket **6920**. Specifically, in the exemplified embodiment

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the mounting elements **6923** are both apertures. One of the apertures has a circular-shaped insertion section and a thinner elongated nesting section which is generally used to accept a screw head and neck. The other of the apertures has an elongated section only (i.e., rectangular shaped) without a circular-shaped insertion section so that it can accept/receive one of the hooks of the bracket assembly **150**. Of course, variations to the shapes of the apertures of the mounting elements **6923** are possible in other embodiments. For example, in some embodiments both of the mounting elements **6923** of the mounting bracket **6920** may have a circular-shaped insertion section and an elongated nesting section. In still other embodiments, both of the mounting elements **6923** could be rectangular shaped apertures. Thus, variations are possible as should be understood in the context of the disclosure set forth herein its entirety.

The second portions **6922** of the mounting bracket **6920** are coupled to the first portions **6921** of the mounting bracket **6920** by inclined connector members **6924**. Specifically, one of the inclined connector members **6924** extends from each end of each of the second portions **6922** of the mounting bracket **6920** to the first portions **6921** of the mounting bracket **6920**. The inclined connector members **6924** are oriented at an angle relative to the first and second portions **6921**, **6922** of the mounting bracket **6920**. Thus, if the first and second portions **6921**, **6922** are planar and parallel to one another as they appear in the exemplified embodiment, the inclined connector members **6924** are oblique relative to the first and second portions **6921**, **6922**. In fact, regardless of the relative orientation of the first and second portions **6921**, **6922** to each other, the inclined connector members **6924** are oriented obliquely relative to each of the first and second portions **6921**, **6922** in the exemplified embodiment. In other embodiments, it may be possible for the inclined connector members **6924** to be oriented perpendicularly to the first and second portions **6921**, **6922** of the mounting bracket **6920**.

Due to the inclination of the connector members **6924**, as the first portions **6921** of the mounting bracket **6920** are secured to the floor **6906** of the channel **6905**, the second portions **6922** of the mounting bracket **6920** are elevated or raised above the floor **6906** of the channel **6905**. This ensures that there is a space between the rear surface of the mounting brackets **6920** and the floor **6906** of the channel **6905** within which the hooks of the bracket assembly **150** can best when the bracket assembly **150** is coupled to the mounting brackets **6920**. FIG. **68** also shows that the inclined orientation of the connector members **6924** elevates the second portions **6922** of the mounting bracket **6920** relative to the first portions **6921** of the mounting bracket **6920**.

Although there are many embodiments disclosed herein, some features may only be described with regard to one embodiment despite that feature being applicable to other of the embodiments disclosed herein. For example, the bracket assembly and the elongate members are illustrated in most of the embodiments. However, they are described in varying detail in each embodiment. It should be appreciated that the disclosure of one embodiment may be applicable to other embodiments and the omission of a detailed description of some features in some embodiments may be done in the interest of brevity.

While the invention has been described with respect to specific examples including presently preferred modes of carrying out the invention, those skilled in the art will appreciate that there are numerous variations and permutations of the above described systems and techniques. It is to

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be understood that other embodiments may be utilized and structural and functional modifications may be made without departing from the scope of the present invention. Thus, the spirit and scope of the invention should be construed broadly as set forth in the appended claims.

What is claimed is:

1. An over-the-door hanging apparatus comprising:
  - a mirror apparatus comprising a rear surface and a vertical centerline;
  - a first mounting element located on the rear surface of the mirror apparatus on a first side of the vertical centerline;
  - a second mounting element located on the rear surface of the mirror apparatus on a second side of the vertical centerline;
  - a first elongate member comprising a first bracket for engaging a top edge of a door, a first hook, and a second hook;
  - a second elongate member comprising a second bracket for engaging the top edge of the door, a first hook, and a second hook;
  - the mirror apparatus slidably mounted to the first elongate member through slidable mating between the first mounting element on the rear surface of the mirror apparatus and one of the first and second hooks of the first elongate member; and
  - the mirror apparatus slidably mounted to the second elongate member through slidable mating between the second mounting element on the rear surface of the mirror apparatus and one of the first and second hooks of the second elongate member.
2. The over-the-door hanging apparatus according to claim 1 wherein the mirror apparatus comprises a frame and a mirror positioned within a central opening of the frame.
3. The over-the-door hanging apparatus according to claim 1 further comprising:
  - the first elongate member comprising a distal end and a proximal end, the first hook of the first elongate member located closer to the distal end than the second hook of the first elongate member; and
  - the second elongate member comprising a distal end and a proximal end, the first hook of the second elongate member located closer to the distal end than the second hook of the second elongate member.
4. The over-the-door hanging apparatus according to claim 3 further comprising:
  - the first elongate member comprising a third hook that is located further from the distal end of the first elongate member than the second hook, the mirror apparatus slidably mounted to the first elongate member through slidable mating between the first mounting element on the rear surface of the mirror apparatus and one of the first, second, and third hooks of the first elongate member; and
  - the second elongate member comprising a third hook that is located further from the distal end of the second elongate member than the second hook, the mirror apparatus slidably mounted to the second elongate member through slidable mating between the second mounting element on the rear surface of the mirror apparatus and one of the first, second, and third hooks of the second elongate member.
5. The over-the-door hanging apparatus according to claim 3 wherein with the first and second brackets of the first and second elongate members engaging the top edge of the door, a hanging height of the mirror apparatus is adjustable between: (1) a first hanging height whereby the mirror

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apparatus is mounted to the first hook of the first elongate member and to the first hook of the second elongate member; and (2) a second hanging height whereby the mirror apparatus is mounted to the second hook of the first elongate member and the second hook of the second elongate member.

6. The over-the-door hanging apparatus according to claim 1 wherein the first mounting element on the rear surface of the mirror apparatus comprises a first plate member that is coupled to the rear surface of the mirror apparatus and a first D-ring that is pivotably coupled to the first plate member, and wherein the second mounting element on the rear surface of the mirror apparatus comprises a second plate member that is coupled to the rear surface of the mirror apparatus and a second D-ring that is pivotably coupled to the second plate member.

7. The over-the-door hanging apparatus according to claim 6 wherein the first plate member is coupled to the rear surface of the mirror apparatus with one or more screws, and wherein the second plate member is coupled to the rear surface of the mirror apparatus with one or more screws.

8. The over-the-door mirror apparatus according to claim 1 wherein a surface of the first elongate member is maintained parallel to the rear surface of the mirror apparatus when the mirror apparatus is mounted to the first elongate member, and wherein a surface of the second elongate member is maintained parallel to the rear surface of the mirror apparatus when the mirror apparatus is mounted to the second elongate member.

9. The over-the-door mirror apparatus according to claim 1 further comprising:

- each of the first and second elongate members being an integrally formed structure formed by appropriately bending a flat strip of metal;
- the first bracket and the first hook of the first elongate member extending in opposite directions; and
- the second bracket and the first hook of the second elongate member extending in opposite directions.

10. The over-the-door mirror apparatus according to claim 1 wherein the rear surface of the mirror apparatus comprises a first lateral edge and an opposite second lateral edge, the first mounting element located adjacent to the first lateral edge and the second mounting element located adjacent to the second lateral edge.

11. An over-the-door hanging apparatus comprising:

- a mirror apparatus comprising a rear surface;
- a first mounting element and a second mounting element located on the rear surface of the mirror apparatus on opposite sides of a vertical centerline of the mirror apparatus;
- a first elongate member comprising a first bracket for engaging a top edge of a door, a first hook, and a second hook;
- a second elongate member comprising a second bracket for engaging the top edge of the door, a first hook, and a second hook; and

wherein the mirror apparatus is alterable between: (1) being slidably mounted to the first and second elongate members at a first height by slidable mating between the first hook of the first elongate member and the first mounting element and slidable mating between the first hook of the second elongate member and the second mounting element; and (2) being slidably mounted to the first and second elongate members at a second height by slidable mating between the second hook of the first elongate member and the first mounting element

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ment and slidable mating between the second hook of the second elongate member and the second mounting element.

12. The over-the-door hanging apparatus according to claim 11 further comprising:

- the first elongate member comprising a distal end and a proximal end, the first hook of the first elongate member located closer to the distal end than the second hook of the first elongate member; and
- the second elongate member comprising a distal end and a proximal end, the first hook of the second elongate member located closer to the distal end than the second hook of the second elongate member.

13. The over-the-door hanging apparatus according to claim 12 further comprising:

- the first elongate member comprising a third hook that is located further from the distal end of the first elongate member than the second hook;
- the second elongate member comprising a third hook that is located further from the distal end of the second elongate member than the second hook; and
- wherein the mirror apparatus is alterable to be slidably mounted to the first and second elongate members at a third height by slidable mating between the third hook of the first elongate member and the first mounting element and slidable mating between the third hook of the second elongate member and the second mounting element.

14. The over-the-door hanging apparatus according to claim 11 wherein the first mounting element on the rear surface of the mirror apparatus comprises a first plate member that is coupled to the rear surface of the mirror apparatus and a first ring member that is pivotably coupled to the first plate member, and wherein the second mounting element on the rear surface of the mirror apparatus comprises a second plate member that is coupled to the rear surface of the mirror apparatus and a second ring member that is pivotably coupled to the second plate member.

15. The over-the-door hanging apparatus according to claim 14 wherein the first plate member is coupled to the rear surface of the mirror apparatus with one or more screws, and wherein the second plate member is coupled to the rear surface of the mirror apparatus with one or more screws.

16. The over-the-door hanging apparatus according to claim 11 wherein the mirror apparatus comprises a frame and a mirror positioned within a central opening of the frame.

17. A method of hanging a mirror apparatus from a door, the method comprising:

- slidably attaching a first elongate member to a support structure so that a first hook of the first elongate member slidably mates with a first mounting element on the support structure;
- slidably attaching a second elongate member to the support structure so that a first hook of the second elongate member slidably mates with a second mounting element on the support structure;
- lowering the first and second elongate members so that a first bracket of the first elongate member and a second bracket of the second elongate member slide over and engage a top edge of a door; and
- adjusting a hanging height of the support structure by:
  - disengaging the first hook of the first elongate member from the first mounting element and disengaging the first hook of the second elongate member from the second mounting element;

slidably mating a second hook of the first elongate member with the first mounting element; and  
slidably mating a second hook of the second elongate member with the second mounting element.

**18.** The method according to claim **17** further comprising: 5  
the first elongate member comprising a distal end and a proximal end, the first bracket of the first elongate member located at the proximal end of the first elongate member, and the first hook of the first elongate member being located closer to the distal end of the first 10  
elongate member than the second hook of the first elongate member; and

the second elongate member comprising a distal end and a proximal end, the second bracket of the second elongate member located at the proximal end of the 15  
second elongate member, and the first hook of the second elongate member being located closer to the distal end of the second elongate member than the second hook of the second elongate member.

**19.** The methods according to claim **17** wherein slidably 20  
attaching the first elongate member to the support structure comprises inserting one of the first and second hooks of the first elongate member through an aperture of the first mounting element, and wherein slidably attaching the second 25  
elongate member to the support structure comprises inserting one of the first and second hooks of the second elongate member through an aperture of the second mounting element.

**20.** The method according to claim **17** wherein each of the first and second elongate members is an integrally formed 30  
structure formed by appropriately bending a flat strip of metal.

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